talonlpe.com • 866.742.0742

TALON LPE

Closure Report

Pickard State 002H
Lea County, New Mexico
API ID # 30-025-41614
Incident # NTO1419030269

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

July 24, 2023

NMOCD
506 W. Texas Ave
Artesia, NM 88210

Subject: **Closure Report**
Pickard State 002H
Lea County, New Mexico
API ID # 30-025-41614
Incident # NTO1419030269

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 Pickard State 002H is located approximately 24 miles west of Hobbs, New Mexico. The legal location for this release is Unit Letter O, Section 20, Township 18 South, and Range 34 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.7278938 and -103.5797653. 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 Kimbrough-Lea complex 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 sands 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 0.19 miles from the site and is recorded at 180 feet below ground surface (bgs). Further research of the Bureau of Land Management Karst data indicates that this site is situated outside a potential Karst area. The FEMA data base locates the site in a minimal flood hazard zone.

Approximate Depth to Groundwater	**180 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 available that meets New Mexico Oil Conservation Division's (NMOCD) criteria within ½ mile of the site, the responsible party will adhere to the cleanup criteria for this site of groundwater greater than 100 feet bgs, Table I, NMOCD Rule 19.15.29 NMAC.

Closure Criteria for Soils Impacted by a Release			
Depth below horizon-tal extents of release to ground water less than 10,000 mg/l TDS	Constituent	Method	Limit
> 100 feet	Total Chlorides	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 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 March 27, 2014, a release was discovered at the Pickard State No. 002H location due to a failed valve on the mud pit sand trap. Initial response activities were immediate and conducted by the operator. These included source elimination and repair, containment and site stabilization with a hydrovac, which recovered approximately 200 barrels of the water-based mud. Approximately 200 barrels (bbls) of drilling mud was released on the pad location with 200 (bbls) of fluids recovered. The initial C-141 was submitted to the NMOCD, can be reviewed under incident number NTO1419030269. The site location map is presented in Appendix I.

Regulatory Response

On February 10, 2023, NMOCD rejected the closure report submitted by Matador for the following reasons: Release has not been adequately delineated. Lateral samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release, regardless of depth to groundwater. Additional delineation warranted by points L3 thru L6, L8, L12, L14, L16, L18, L20, L22 & L23. Please resubmit a revised Closure Report to the OCD portal by March 10, 2023.

Site Assessment Activities

On February 6, 2023, upon client authorization, Talon mobilized personnel to the site to conduct an initial site assessment. Release areas was undefined by the NMOCD reports. Soil samples were collected, chloride titrations and photoionization detector were used around various spots on pad to determine release area. Field titration results showed high signs of chlorides near tank battery. 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

Pickard State 2H									
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 = 1000 mg/kg**			**2,500 mg/kg**	**20,000 mg/kg**
S-1	2/6/23	1'R	ND	ND	ND	ND	ND	ND	10,800
S-2	2/6/23	1'R	ND	ND	ND	ND	ND	ND	3,520
S-3	2/6/23	1'R	ND	ND	ND	ND	ND	ND	1,710

NOTES:

BGS	Below ground surface
mg/kg	Milligrams per kilogram
TPH	Total Petroleum Hydrocarbons
GRO	Gasoline range organics
DRO	Diesel range organics
MRO	Motor oil range organics
S	Sample
C	Confirmation Sample
SW	Sidewall Sample
TT	Test Trench
R	Refusal
ND	Analyte Not Detected
NT	Analyte Not Tested

Highlighted cells indicate exceedance of NMOCD Table 1 Closure Criteria

Remediation Activities

On April 26, 2023, Talon personnel returned to location to remove impacted soils located around suspected historical release area near the tank battery and extending onto the pad. Backhoe refusal was encountered at 2 feet bgs. and composite samples were taken at this point. 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 May 23, 2023 Talon personnel returned to locations to gather more samples on impacted sample points. Using a rock bar to chip at the bedrock samples 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).

On June 5, 2023 Talon returned to location to resample C-8, C-10, C-13, C-14, and Sw-4. Due to heavy rainfall the previous week samples 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 Figure 2 in Appendix I and complete laboratory analytical reports are presented in Appendix V.

Table 2
Site Closure Analytical Data

Pickard State 2H									
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	4/26/23	2R	ND	ND	ND	ND	ND	ND	512
C-2	4/26/23	2R	ND	ND	ND	ND	ND	ND	1010
	5/23/23	2R	ND	ND	ND	ND	ND	ND	336
C-3	4/26/23	2R	ND	ND	ND	ND	ND	ND	800
	5/23/23	2R	ND	ND	ND	ND	ND	ND	80
C-4	4/26/23	2R	ND	ND	ND	ND	ND	ND	1120
	5/23/23	2R	ND	ND	ND	ND	ND	ND	256
C-5	4/26/23	2R	ND	ND	ND	ND	ND	ND	1090
	5/23/23	2R	ND	ND	ND	ND	ND	ND	112
C-6	4/26/23	2R	ND	ND	ND	ND	ND	ND	576
C-7	4/26/23	2R	ND	ND	ND	ND	ND	ND	1570
	5/23/23	2R	ND	ND	ND	ND	ND	ND	272
C-8	4/26/23	2R	ND	ND	ND	ND	ND	ND	1250
	5/23/23	2R	ND	ND	ND	ND	ND	ND	720
	6/5/23	2R	ND	ND	ND	ND	ND	ND	288
C-9	4/26/23	2R	ND	ND	ND	ND	ND	ND	2080
	5/23/23	2R	ND	ND	ND	ND	ND	ND	176
C-10	4/26/23	2R	ND	ND	ND	ND	ND	ND	1410
	5/23/23	2R	ND	ND	ND	ND	ND	ND	1500
	6/5/23	2R	ND	ND	ND	ND	ND	ND	384
C-11	4/26/23	2R	ND	ND	ND	ND	ND	ND	288
C-12	4/26/23	2R	ND	ND	ND	ND	ND	ND	1120
	5/23/23	2R	ND	ND	ND	ND	ND	ND	192
C-13	4/26/23	2R	ND	ND	ND	ND	ND	ND	1710
	5/23/23	2R	ND	ND	ND	ND	ND	ND	1340
	6/5/23	2R	ND	ND	ND	ND	ND	ND	528
C-14	4/26/3	2R	ND	ND	ND	ND	ND	ND	1330
	5/23/23	2R	ND	ND	ND	ND	ND	ND	2520
	6/5/23	2R	ND	ND	ND	ND	ND	ND	528
C-15	4/26/23	2R	ND	ND	ND	ND	ND	ND	752
	5/23/23	2R	ND	ND	ND	ND	ND	ND	64
SW-1	4/26/23		ND	ND	ND	ND	ND	ND	432
SW-2	4/26/23		ND	ND	ND	ND	ND	ND	752

	5/23/23		ND	ND	ND	ND	ND	ND	352
SW-3	6/5/23		ND	ND	ND	ND	ND	ND	560
SW-4	4/26/23		ND	ND	ND	ND	ND	ND	880
	5/23/23		ND	ND	ND	ND	ND	ND	1040
	6/5/23		ND	ND	ND	ND	ND	ND	240
SW-5	4/26/23		ND	ND	ND	ND	ND	ND	480
SW-6	4/26/23		ND	ND	ND	ND	ND	ND	1440
	5/23/23		ND	ND	ND	ND	ND	ND	384

NOTES:

BGS	Below ground surface
mg/kg	Milligrams per kilogram
TPH	Total Petroleum Hydrocarbons
GRO	Gasoline range organics
DRO	Diesel range organics
MRO	Motor oil range organics
S	Sample
C	Confirmation Sample
SW	Sidewall Sample
TT	Test Trench
R	Refusal
ND	Analyte Not Detected
NT	Analyte Not Tested

Highlighted cells indicate exceedance of NMOCD Table 1 Closure Criteria

Remedial Action Summary

- The impacted areas on location were excavated to depths of 2 feet bgs. Talon used a photoionization detector and field titrated on soil samples 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 the well pad were backfilled with new caliche, 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 this 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

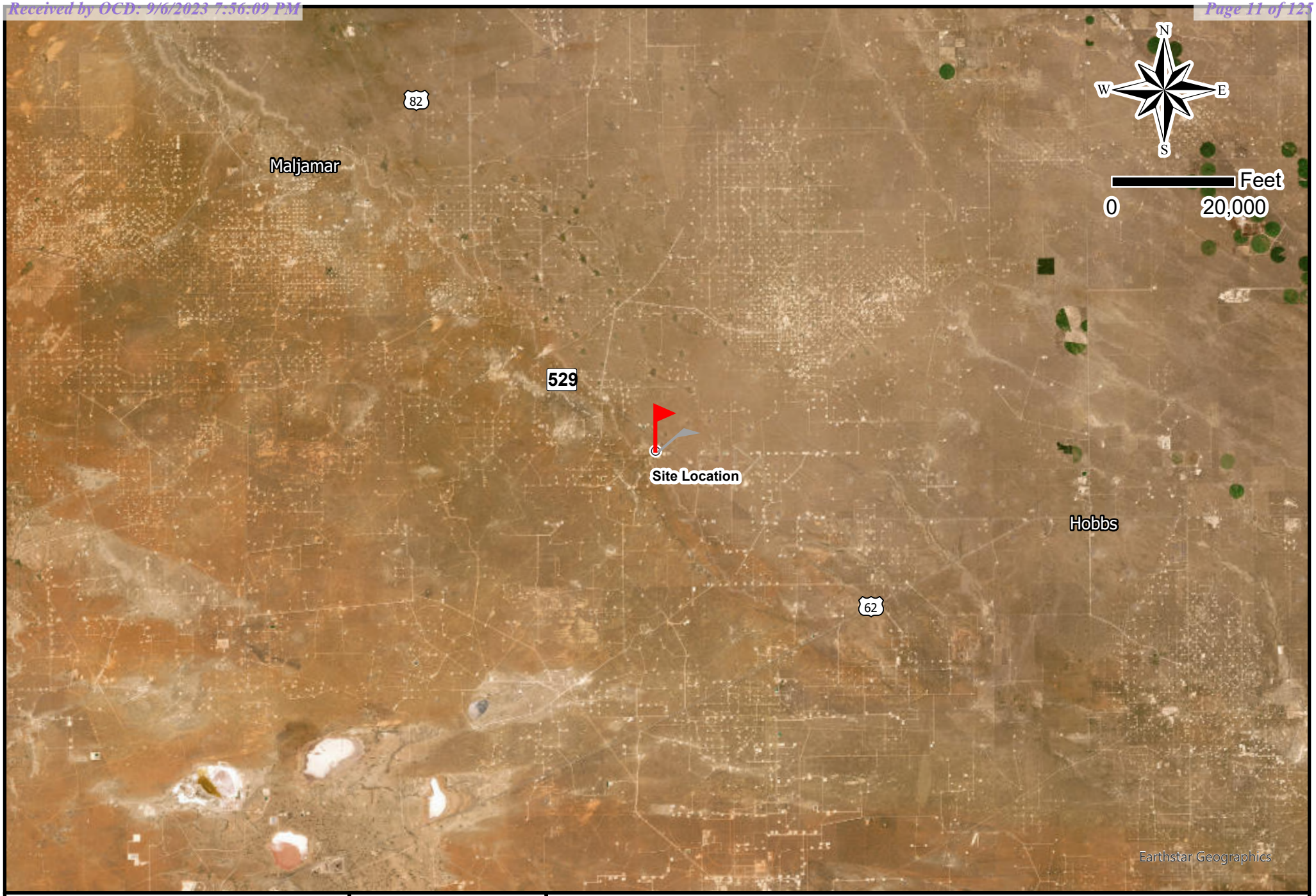
Chad Hensley
Project Manager

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

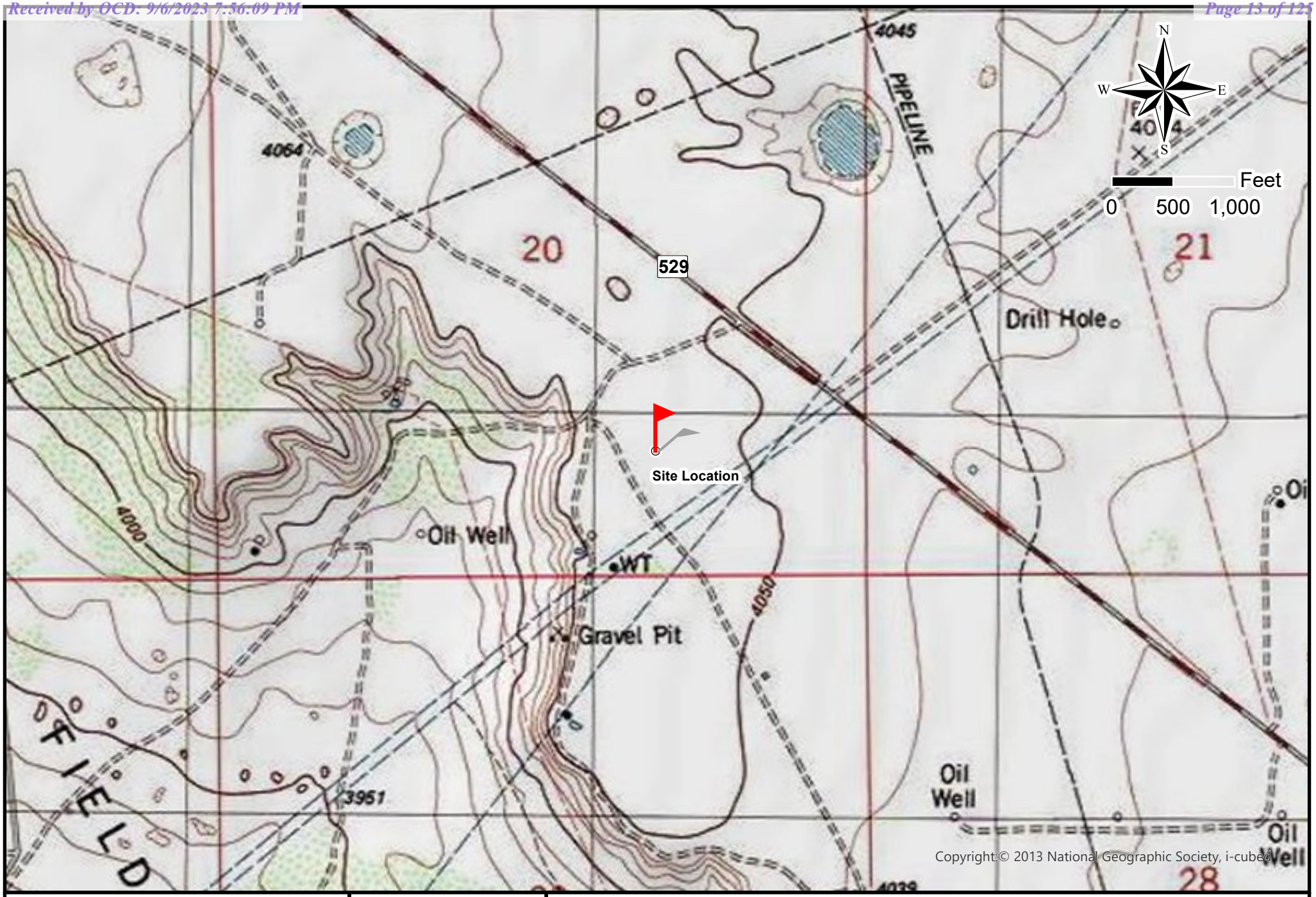
Drafted: 2/27/2023
1 in = 20,000 ft
Drafted By: IJR

Matador Production Co.
Pickard State #002H
Lea County, NM
Site Map

TALON LPE

Drafted: 2/27/2023
1 in = 1,000 ft
Drafted By: IJR

Matador Production Co.
Pickard State #002H
Lea County, NM
Karst Map



TALON LPE

Drafted: 2/27/2023
1 in = 1,000 ft
Drafted By: IJR

Matador Production Co.
Pickard State #002H
Lea County, NM
Topographic Map

TALON LPE

Drafted: 2/27/2023
1 in = 50 ft
Drafted By: IJR

Figure 1

Matador Production Co.
Pickard State #002H
Lea County, NM
Assessment Map

TALON LPE

Drafted: 5/26/2023
1 in = 50 ft
Drafted By: IJR

Figure 2

Matador Production Co.
Pickard State #002H
Lea County, NM
Confirmation Map

Appendix II

Groundwater Data

Soil Survey

FEMA Flood 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	Tws	Rng	X	Y
	CP 01582 POD1	2	1	2	29	18S	34E	633167	3621715

Driller License: 1611 **Driller Company:** GOERTZEN DRILLING

Driller Name: GOERTZEN, JOHN

Drill Start Date: 07/12/2016 **Drill Finish Date:** 07/13/2016 **Plug Date:**

Log File Date: 07/22/2016 **PCW Rcv Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:**

Casing Size: 10.75 **Depth Well:** 180 feet **Depth Water:** 180 feet

Water Bearing Stratifications:	Top	Bottom	Description
	52	150	Sandstone/Gravel/Conglomerate
	150	175	Sandstone/Gravel/Conglomerate
	175	180	Other/Unknown

Casing Perforations:	Top	Bottom
	0	180

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

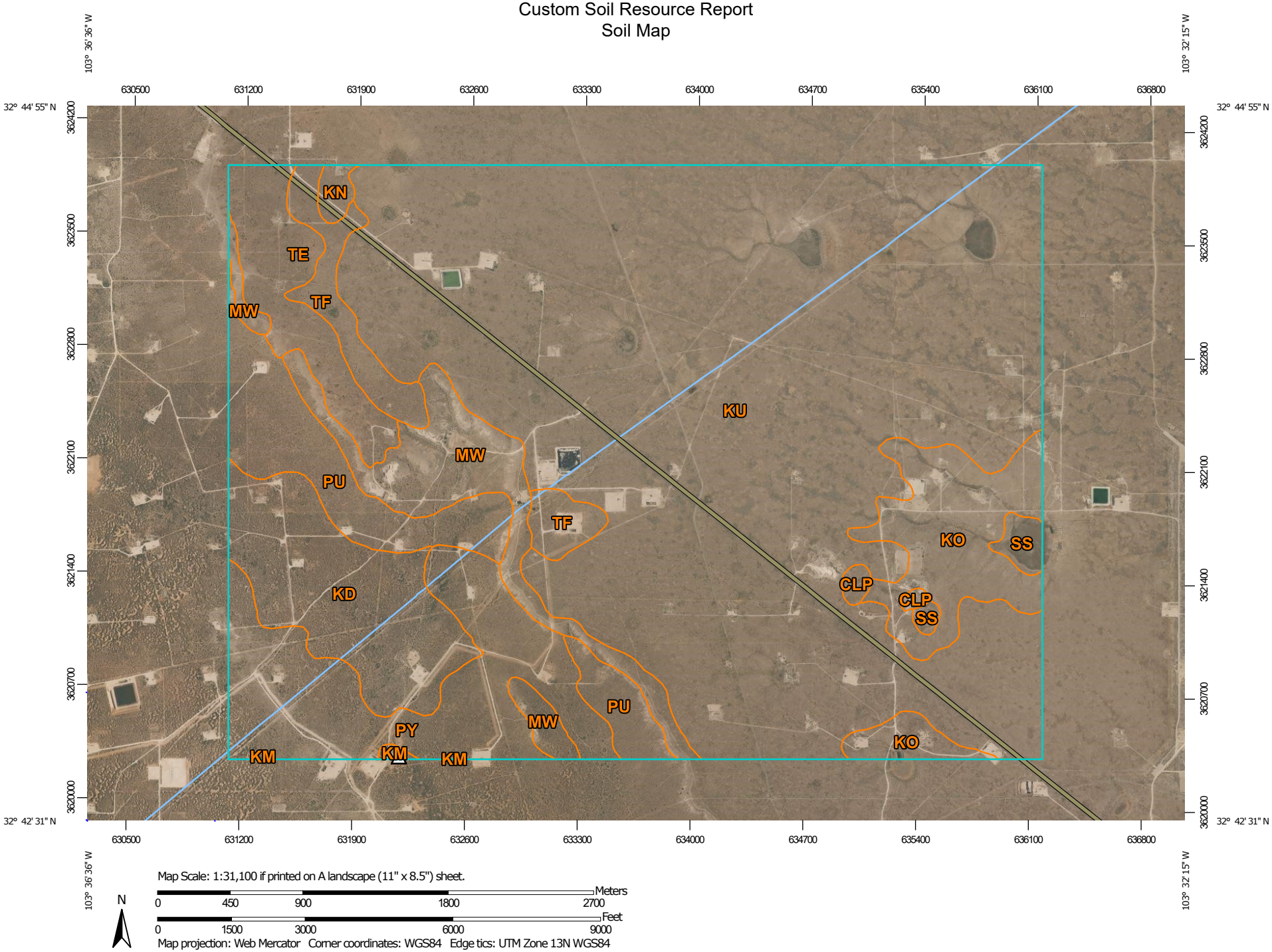
Custom Soil Resource Report for Lea County, New Mexico

February 13, 2023

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

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.

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.

Lea County, New Mexico

CLP—Caliche pit

Map Unit Setting

National map unit symbol: 1n9fb
Elevation: 3,600 to 4,400 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 195 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Pits, caliche: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pits, Caliche

Setting

Landform position (two-dimensional): Footslope, backslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits derived from sedimentary rock

Interpretive groups

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

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

Map Unit Setting

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

Map Unit Composition

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

Description of Kermit

Setting

Landform: Dunes

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

Typical profile

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

Properties and qualities

Slope: 3 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R070BD005NM - Deep Sand
Hydric soil rating: No

Description of Palomas

Setting

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

Typical profile

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

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

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

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

Palomas
Percent of map unit: 1 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

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

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

KN—Kimbrough loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2qmyr
Elevation: 2,500 to 4,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 3 inches: loam
Bw - 3 to 10 inches: loam
Bkkm1 - 10 to 16 inches: cemented material
Bkkm2 - 16 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 4 to 18 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 95 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Minor Components

Eunice

Percent of map unit: 6 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Spraberry

Percent of map unit: 5 percent
Landform: Playa rims, plains
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Kenhill

Percent of map unit: 4 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY038TX - Clay Loam 12-17" PZ
Hydric soil rating: No

KO—Kimbrough gravelly loam, dry, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tw43
Elevation: 2,500 to 4,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough, dry, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough, Dry

Setting

Landform: Playa rims, plains
Down-slope shape: Convex, linear
Across-slope shape: Concave, linear
Parent material: Loamy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 3 inches: gravelly loam
Bw - 3 to 10 inches: loam
Bkkm1 - 10 to 16 inches: cemented material
Bkkm2 - 16 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 4 to 18 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 95 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Minor Components

Eunice

Percent of map unit: 10 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Spraberry

Percent of map unit: 6 percent
Landform: Playa rims, plains
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Kenhill

Percent of map unit: 4 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY038TX - Clay Loam 12-17" PZ
Hydric soil rating: No

KU—Kimbrough-Lea complex, dry, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tw46
Elevation: 2,500 to 4,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough and similar soils: 45 percent
Lea and similar soils: 25 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough

Setting

Landform: Playa rims, plains
Down-slope shape: Convex, linear
Across-slope shape: Concave, linear
Parent material: Loamy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 3 inches: gravelly loam
Bw - 3 to 10 inches: loam
Bkkm1 - 10 to 16 inches: cemented material
Bkkm2 - 16 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 4 to 18 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 95 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Description of Lea

Setting

Landform: Plains
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Calcareous, loamy eolian deposits from the blackwater draw formation of pleistocene age over indurated caliche of pliocene age

Typical profile

A - 0 to 10 inches: loam
Bk - 10 to 18 inches: loam
Bkk - 18 to 26 inches: gravelly fine sandy loam
Bkkm - 26 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 22 to 30 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 90 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 3.0

Available water supply, 0 to 60 inches: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R077DY047TX - Sandy Loam 12-17" PZ
Hydric soil rating: No

Minor Components

Douro

Percent of map unit: 12 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY047TX - Sandy Loam 12-17" PZ
Other vegetative classification: Unnamed (G077DH000TX)
Hydric soil rating: No

Kenhill

Percent of map unit: 12 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY038TX - Clay Loam 12-17" PZ
Hydric soil rating: No

Spraberry

Percent of map unit: 6 percent
Landform: Playa rims, plains
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Other vegetative classification: Unnamed (G077DH000TX)
Hydric soil rating: No

MW—Mobeetie-Potter association, 1 to 15 percent slopes

Map Unit Setting

National map unit symbol: dmqh
Elevation: 3,000 to 6,500 feet
Mean annual precipitation: 10 to 16 inches
Mean annual air temperature: 48 to 62 degrees F
Frost-free period: 110 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Mobeetie and similar soils: 70 percent
Potter and similar soils: 24 percent

Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mobeetie

Setting

Landform: Escarpments, draws
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous sandy alluvium derived from sedimentary rock

Typical profile

A - 0 to 4 inches: fine sandy loam
Bw - 4 to 24 inches: fine sandy loam
Bk - 24 to 60 inches: fine sandy loam

Properties and qualities

Slope: 1 to 10 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): 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: 15 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R077CY035TX - Sandy 16-21" PZ
Hydric soil rating: No

Description of Potter

Setting

Landform: Escarpments, draws
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous alluvium and/or calcareous eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 4 inches: gravelly fine sandy loam
BCk - 4 to 14 inches: extremely cobbly loam

Properties and qualities

Slope: 5 to 15 percent

Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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: 70 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: R077CY037TX - Very Shallow 16-21" PZ
Hydric soil rating: No

Minor Components

Maljamar

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

Ustifluvents

Percent of map unit: 1 percent
Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: R070BC008NM - Draw
Hydric soil rating: Yes

Stony rock land

Percent of map unit: 1 percent
Ecological site: R070BC025NM - Shallow
Hydric soil rating: No

Pyote

Percent of map unit: 1 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Mansker

Percent of map unit: 1 percent
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
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

PY—Pyote soils and Dune land

Map Unit Setting

National map unit symbol: dmqr
Elevation: 3,000 to 4,400 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 190 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Pyote 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 Pyote

Setting

Landform: Depressions
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
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 Dune Land

Setting

Landform: Dunes
Landform position (two-dimensional): Backslope, shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Linear, convex
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

Kermit

Percent of map unit: 5 percent
Ecological site: R070BC022NM - Sandhills
Hydric soil rating: No

Maljamar, fine sand

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

SS—Stegall and Slaughter soils

Map Unit Setting

National map unit symbol: dmr4
Elevation: 3,600 to 4,400 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Stegall and similar soils: 40 percent
Slaughter and similar soils: 35 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Stegall

Setting

Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

A - 0 to 9 inches: loam
Bt - 9 to 28 inches: clay loam
Bkm - 28 to 38 inches: cemented material
BCk - 38 to 60 inches: variable

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 90 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 4.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Description of Slaughter

Setting

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

Typical profile

A - 0 to 2 inches: loam

Bt - 2 to 15 inches: clay
Bkm - 15 to 25 inches: cemented material
BCk - 25 to 60 inches: variable

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches; More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 90 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): 6s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Minor Components

Arvana

Percent of map unit: 10 percent
Ecological site: R077CY035TX - Sandy 16-21" PZ
Hydric soil rating: No

Kimbrough

Percent of map unit: 9 percent
Ecological site: R077CY037TX - Very Shallow 16-21" PZ
Hydric soil rating: No

Portales

Percent of map unit: 6 percent
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

TE—Tonuco fine sand, hummocky

Map Unit Setting

National map unit symbol: dmrg
Elevation: 3,000 to 4,400 feet
Mean annual precipitation: 10 to 13 inches

Mean annual air temperature: 59 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Tonuco and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tonuco

Setting

Landform: Plains, ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 12 inches: fine sand
AC - 12 to 17 inches: loamy fine sand
Bkm - 17 to 27 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 6 to 20 inches to petrocalcic
Drainage class: Excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 1.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 5 percent
Ecological site: R070BD002NM - Shallow Sandy
Hydric soil rating: No

Maljamar

Percent of map unit: 3 percent
Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

Cacique

Percent of map unit: 3 percent
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Dune land

Percent of map unit: 2 percent
Hydric soil rating: No

Palomas

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

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

Map Unit Setting

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

Map Unit Composition

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

Description of Tonuco

Setting

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

Typical profile

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

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 12 to 20 inches to petrocalcic
Drainage class: Excessively drained
Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R077DY048TX - Shallow 12-17" PZ
Hydric soil rating: No

Minor Components

Simona

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

Berino

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

Cacique

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

Appendix III

C-141 Forms

HOBBS OCD

APR 01 2014

RECEIVED

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

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

Matador Production Company **OPERATOR** ☒ Initial Report ☐ Final Report

Name of Company 5400 LBJ FREEWAY, STE 1500	Contact Aaron Byrd
Address Dallas, TX 75240	Telephone No. 972-371-5267
Facility Name Pickard State 002H	Facility Type Oil Well

Surface Owner State	Mineral Owner State	API No. 30-025-41614

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	20	18S	34E	702	SOUTH	1776	EAST	LEA

NAD 27 Latitude N 32.7267615 Longitude W 103.5807777

NATURE OF RELEASE

Type of Release WATER BASED MUD	Volume of Release 200 / Volume Recovered 200
Source of Release MUD PIT SAND TRAP	Date and Hour of Occurrence ↓ / Date and Hour of Discovery ↓
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? 03/27/14 @ 17:00 HRS
By Whom? Wayne Greer	Date and Hour Maxey Brown 03/27/14 @ 18:00 hrs
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Valve on sand trap failed. Installed bull plug on outside of valve. Will replace valve on rig move.

Describe Area Affected and Cleanup Action Taken.* Area behind mud pits was affected. Vacuum trucks & super sucker & roustabouts were called. Mud & rainwater was vacuumed from ground surface. Ground surface was squeegeed to low spot & that volume was vacuumed up along with any rain water.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

	OIL CONSERVATION DIVISION	
Signature: [signature]	Approved by Environmental Specialist: [signature]	
Printed Name: Aaron Byrd		
Title: Sr. Drilling Engineer	Approval Date: 7-9-14	Expiration Date: 9-12-14
E-mail Address: abyrd@matadorresources.com	Conditions of Approval: Site samples required	Attached ☐ 7-14-3159
Date: 03/28/2014 Phone: 972-371-5267		

* Attach Additional Sheets If Necessary

Delineate remediate area as per NMOCD guides. Submit final C-141 by 9-12-14

ogrid 228937
nTO 1419 030269
pTO 1419

JUL 09 2014

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Matador Resources	OGRID: 228937
Contact Name: John Hurt	Contact Telephone: 972-371-5200
Contact email: JHurt@matadorresources.com	Incident # 2RP-3159
Contact mailing address :5400 LBJ Freeway, Suite 1500 Dallas, TX 75240	

Location of Release Source

Latitude 32.7267615 Longitude -103.580777
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Pickard State No. 002H	Site Type: Oil Well
Date Release Discovered: 3/27/2014	API# 30-025-41614

Unit Letter	Section	Township	Range	County
O	20	18S	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)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☒ Other: Water Based Mud	Volume/Weight Released (provide units) 200 bbls	Volume/Weight Recovered (provide units) 200 bbls
Cause of Release: The valve on the mud pit sand trap failed		

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? >25 bbls
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes. By Wayne Greet on 3/27/14 @ 17:00 to Maxey Brown	

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: John Hurt Title: RES Specialist

Signature: Date: 3/4/19

email: JHurt@matadorresources.com Telephone: 972-371-5200

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NTO1419030269
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	114 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NTO1419030269
District RP	
Facility ID	
Application ID	

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

Printed Name: John Hurt Title: RES Specialist

Signature: Date: 3/4/19

email: JHurt@matadorresources.com Telephone: 972-371-5200

OCD Only

Received by: Jocelyn Harimon Date: 01/12/2023

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

☑ Description of remediation activities

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

Printed Name: Clinton Talley Title: EHS

Signature: Clint Talley Date: 9/6/2023

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: Ashley Maxwell Date: 9/26/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist

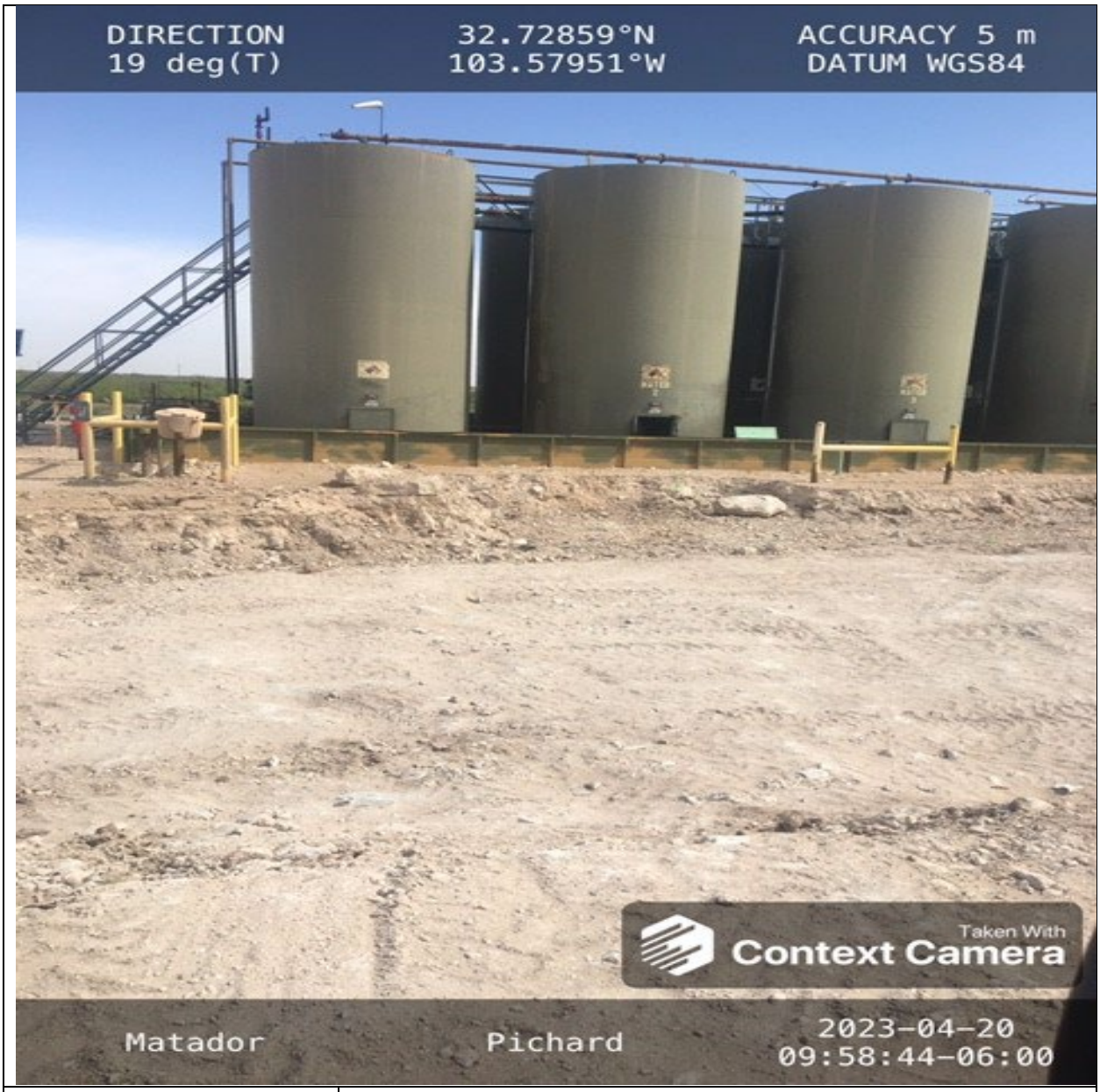
Appendix IV

Photographic Documentation

Pickard State #2 I Environmental Excavation
Eddy, New Mexico

Photograph No.1 Description:	Pickard Excavation.

Photograph No.2 Description:	Pickard Excavation.



Photograph No.3 Description:	Pickard Excavation.

Photograph No.4 Description:	Pickard Excavation.

Appendix V

Laboratory Reports

CARDINAL Laboratories

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

April 03, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: PICKARD STATE 2H

Enclosed are the results of analyses for samples received by the laboratory on 03/29/23 13:45.

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

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:	03/29/2023	Sampling Date:	03/22/2023
Reported:	04/03/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: S - 1 @ 1' (H231436-01)

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	03/31/2023	ND	1.92	96.0	2.00	5.48	
Toluene*	<0.050	0.050	03/31/2023	ND	1.91	95.4	2.00	6.65	
Ethylbenzene*	<0.050	0.050	03/31/2023	ND	1.89	94.5	2.00	5.88	
Total Xylenes*	<0.150	0.150	03/31/2023	ND	5.58	92.9	6.00	5.96	
Total BTEX	<0.300	0.300	03/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.5 %* *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	**800**	16.0	03/31/2023	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	03/30/2023	ND	211	106	200	4.91	
DRO >C10-C28*	<10.0	10.0	03/30/2023	ND	202	101	200	2.67	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane *95.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *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:	03/29/2023	Sampling Date:	03/22/2023
Reported:	04/03/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: S - 1 @ 2' (H231436-02)

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	03/31/2023	ND	1.92	96.0	2.00	5.48	
Toluene*	<0.050	0.050	03/31/2023	ND	1.91	95.4	2.00	6.65	
Ethylbenzene*	<0.050	0.050	03/31/2023	ND	1.89	94.5	2.00	5.88	
Total Xylenes*	<0.150	0.150	03/31/2023	ND	5.58	92.9	6.00	5.96	
Total BTEX	<0.300	0.300	03/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *93.4 %* *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	**1310**	16.0	03/31/2023	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	03/30/2023	ND	211	106	200	4.91	
DRO >C10-C28*	<10.0	10.0	03/30/2023	ND	202	101	200	2.67	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane *95.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *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:	03/29/2023	Sampling Date:	03/22/2023
Reported:	04/03/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: S - 2 @ 1' (H231436-03)

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	03/31/2023	ND	1.92	96.0	2.00	5.48	
Toluene*	<0.050	0.050	03/31/2023	ND	1.91	95.4	2.00	6.65	
Ethylbenzene*	<0.050	0.050	03/31/2023	ND	1.89	94.5	2.00	5.88	
Total Xylenes*	<0.150	0.150	03/31/2023	ND	5.58	92.9	6.00	5.96	
Total BTEX	<0.300	0.300	03/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.4 %* *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	**544**	16.0	03/31/2023	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	03/30/2023	ND	211	106	200	4.91	
DRO >C10-C28*	<10.0	10.0	03/30/2023	ND	202	101	200	2.67	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane *93.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *107 %* *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:	03/29/2023	Sampling Date:	03/22/2023
Reported:	04/03/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: S - 2 @ 2' (H231436-04)

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	03/31/2023	ND	1.92	96.0	2.00	5.48	
Toluene*	<0.050	0.050	03/31/2023	ND	1.91	95.4	2.00	6.65	
Ethylbenzene*	<0.050	0.050	03/31/2023	ND	1.89	94.5	2.00	5.88	
Total Xylenes*	<0.150	0.150	03/31/2023	ND	5.58	92.9	6.00	5.96	
Total BTEX	<0.300	0.300	03/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *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	**944**	16.0	03/31/2023	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	03/30/2023	ND	211	106	200	4.91	
DRO >C10-C28*	<10.0	10.0	03/30/2023	ND	202	101	200	2.67	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane *99.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *113 %* *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:	03/29/2023	Sampling Date:	03/22/2023
Reported:	04/03/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: S - 3 @ 1' (H231436-05)

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	03/31/2023	ND	1.92	96.0	2.00	5.48	
Toluene*	<0.050	0.050	03/31/2023	ND	1.91	95.4	2.00	6.65	
Ethylbenzene*	<0.050	0.050	03/31/2023	ND	1.89	94.5	2.00	5.88	
Total Xylenes*	<0.150	0.150	03/31/2023	ND	5.58	92.9	6.00	5.96	
Total BTEX	<0.300	0.300	03/31/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *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	**2120**	16.0	03/31/2023	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	03/30/2023	ND	211	106	200	4.91	
DRO >C10-C28*	<10.0	10.0	03/30/2023	ND	202	101	200	2.67	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane *96.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *108 %* *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:	03/29/2023	Sampling Date:	03/22/2023
Reported:	04/03/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: S - 3 @ 2' (H231436-06)

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	03/30/2023	ND	2.02	101	2.00	4.69	
Toluene*	<0.050	0.050	03/30/2023	ND	2.07	103	2.00	4.41	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	2.05	102	2.00	5.51	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	6.34	106	6.00	3.80	
Total BTEX	<0.300	0.300	03/30/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**688**	16.0	03/31/2023	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	03/30/2023	ND	211	106	200	4.91	
DRO >C10-C28*	<10.0	10.0	03/30/2023	ND	202	101	200	2.67	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane *91.5 %* *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

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.
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: Chad Hensley	P.O. #:
Address: 408 W. Texas Ave	Company:
City: Artesia State: NM Zip: 88210	Attn:
Phone #: 575.746.8768 Fax #:	Address:
Project #: 702520.045.01 Project Owner: Matador	City:
Project Name: Pickard State 2H	State: Zip:
Project Location: Eddy County, NM	Phone #:
Sampler Name: Chad Hensley	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
H231436																	
1	S-1@1'	G	1			✓					✓		3/22/23	08:05	✓	✓	✓
2	S-1@2'					✓					✓			08:11			
3	S-2@1'					✓					✓			08:14			
4	S-2@2'					✓					✓			08:19			
5	S-3@1'					✓					✓			08:22			
6	S-3@2'					✓					✓			08:28	✓	✓	✓

Relinquished By:	Date: 3/27/23	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1345		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	#113 0.8°c / 0.2°c	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)

† 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

May 02, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: MATADOR PICKARD STATE 2

Enclosed are the results of analyses for samples received by the laboratory on 04/26/23 13:40.

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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 1 2' REFUSAL (H232037-01)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *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	**512**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *110 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *142 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 2 2' REFUSAL (H232037-02)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	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	**1010**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/28/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

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

Surrogate: 1-Chlorooctadecane *138 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 3 2' REFUSAL (H232037-03)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	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	**800**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *82.7 %* *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

Analytical Results For:

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

Received:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 4 2' REFUSAL (H232037-04)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *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	**1120**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *92.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *122 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 5 2' REFUSAL (H232037-05)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *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	**1090**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/28/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane *109 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *144 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 6 2' REFUSAL (H232037-06)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *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	**576**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *95.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *126 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 7 2' REFUSAL (H232037-07)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *120 %* *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	**1570**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *90.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *115 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 8 2' REFUSAL (H232037-08)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	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	**1250**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *107 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *139 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 9 2' REFUSAL (H232037-09)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *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	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *81.1 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 10 2' REFUSAL (H232037-10)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *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	**1410**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *101 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *132 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 11 2' REFUSAL (H232037-11)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *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	**288**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *92.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *123 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 12 2' REFUSAL (H232037-12)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	QM-07
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	QM-07
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	QM-07, QR-03
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	QM-07, QR-03
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *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	**1120**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *98.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *128 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 13 2' REFUSAL (H232037-13)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	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	**1710**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *97.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *130 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 14 2' REFUSAL (H232037-14)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *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	**1330**	16.0	04/28/2023	ND	448	112	400	3.64	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/27/2023	ND	172	85.8	200	0.0705	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	152	76.1	200	0.123	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *125 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *160 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: C - 15 2' REFUSAL (H232037-15)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	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	**752**	16.0	04/28/2023	ND	448	112	400	3.64	

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	04/27/2023	ND	213	107	200	3.61	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	202	101	200	4.49	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *87.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.9 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: SW - 1 2' REFUSAL (H232037-16)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	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	**432**	16.0	04/28/2023	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	04/27/2023	ND	213	107	200	3.61	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	202	101	200	4.49	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *81.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *87.2 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: SW - 2 2' REFUSAL (H232037-17)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *119 %* *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	**752**	16.0	04/28/2023	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	04/27/2023	ND	213	107	200	3.61	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	202	101	200	4.49	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *82.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.8 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: SW - 3 2' REFUSAL (H232037-18)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *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	**560**	16.0	04/28/2023	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	04/27/2023	ND	213	107	200	3.61	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	202	101	200	4.49	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *80.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.3 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: SW - 4 2' REFUSAL (H232037-19)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *125 %* *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	**880**	16.0	04/28/2023	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	04/27/2023	ND	183	91.6	200	0.946	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	161	80.7	200	0.644	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *89.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.3 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: SW - 5 2' REFUSAL (H232037-20)

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	04/28/2023	ND	1.84	91.9	2.00	2.77	
Toluene*	<0.050	0.050	04/28/2023	ND	2.11	105	2.00	4.89	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.37	118	2.00	4.01	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	7.14	119	6.00	4.26	
Total BTEX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *120 %* *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	**480**	16.0	04/28/2023	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	04/27/2023	ND	183	91.6	200	0.946	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	161	80.7	200	0.644	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *111 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *113 %* *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:	04/26/2023	Sampling Date:	04/25/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	MATADOR PICKARD STATE 2	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY CO NM		

Sample ID: SW - 6 2' REFUSAL (H232037-21)

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	04/28/2023	ND	1.91	95.3	2.00	10.7	
Toluene*	<0.050	0.050	04/28/2023	ND	1.96	98.0	2.00	12.7	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	1.91	95.6	2.00	12.5	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	5.94	99.0	6.00	12.2	
Total BTEX	<0.300	0.300	04/28/2023	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	**1440**	16.0	04/28/2023	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	04/27/2023	ND	183	91.6	200	0.946	
DRO >C10-C28*	<10.0	10.0	04/27/2023	ND	161	80.7	200	0.644	
EXT DRO >C28-C36	<10.0	10.0	04/27/2023	ND					

Surrogate: 1-Chlorooctane *104 %* *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.
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.
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

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: Chad Hensley
Address: 408 W. Texas Ave
City: Artesia State: NM Zip: 88210
Phone #: 575.746.8768 Fax #:
Project #: 702520.045.01 Project Owner: Matador
Project Name: MatadorPickardState2
Project Location: eddy
Sampler Name: Nathan 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
H232037																	
1	C-1	G	1			✓					✓		4/5/23	9:32	✓	✓	✓
2	C-2													9:38			
3	C-3													9:42			
4	C-4													9:46			
5	C-5													9:50			
6	C-6													9:53			
7	C-7													9:55			
8	C-8													9:58			
9	C-9													10:01			
10	C-10													10:03			

2' Refusal

Relinquished By: Date: 4/26/23 Time: 1340 Received By:
Relinquished By: Date: Time: Received By:

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:
Page 2 of 3

Delivered By: (Circle One) #113
Sampler - UPS - Bus - Other: 0.9c/0.3c

Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials)

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

2

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: Chad Hensley
Address: 408 W. Texas Ave
City: Artesia State: NM Zip: 88210
Phone #: 575.746.8768 Fax #:
Project #: 702520.045.01 Project Owner: Matador
Project Name: MatadorPickardState2
Project Location: Eddy County NM
Sampler Name: Nathan 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
H232037																	
11	C-11 2' Refusal	G	1			✓					✓		4-5-23	10:05	✓	✓	✓
12	C-12													10:10			
13	C-13													10:14			
14	C-14													10:17			
15	C-15													10:26			
16	SW-1													10:32			
17	SW-2													10:41			
18	SW-3													10:46			
19	SW-4													10:49			
20	SW-5													10:53			

Relinquished By: Date: 4/26/23 Time: 1340 Received By: Shad Kigney
Relinquished By: Date: Time: Received By:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: #113
Sample Condition: Cool ☐ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:
Pool 1 of 3

† 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:	Chad Hensley
Address:	408 W. Texas Ave
City:	Artesia
State:	NM
Zip:	88210
Phone #:	575.746.8768
Fax #:	
Project #:	702520.045.01
Project Owner:	
Project Name:	MatadorPickardState2
Project Location:	Eddy county NM
Sampler Name:	Nathan 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
H232037-21	SW-6 2' Refusal	G	1			✓					✓		4/25/23	10:59	✓	✓	✓

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: 4/26/23 Time: 7:40	Received By:	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	#13	Sample Condition Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials)

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

† 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

May 23, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: PICKARD STATE 2H

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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 2 (H232498-01)

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	05/18/2023	ND	1.99	99.6	2.00	6.93	
Toluene*	<0.050	0.050	05/18/2023	ND	2.04	102	2.00	7.27	
Ethylbenzene*	<0.050	0.050	05/18/2023	ND	1.98	99.1	2.00	5.84	
Total Xylenes*	<0.150	0.150	05/18/2023	ND	6.07	101	6.00	6.60	
Total BTEX	<0.300	0.300	05/18/2023	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	**336**	16.0	05/18/2023	ND	384	96.0	400	8.00	

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	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 *90.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *97.3 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 3 (H232498-02)

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	05/18/2023	ND	1.99	99.6	2.00	6.93	
Toluene*	<0.050	0.050	05/18/2023	ND	2.04	102	2.00	7.27	
Ethylbenzene*	<0.050	0.050	05/18/2023	ND	1.98	99.1	2.00	5.84	
Total Xylenes*	<0.150	0.150	05/18/2023	ND	6.07	101	6.00	6.60	
Total BTEX	<0.300	0.300	05/18/2023	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	**80.0**	16.0	05/18/2023	ND	384	96.0	400	8.00	

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	05/23/2023	ND	180	90.0	200	1.20	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	170	84.9	200	2.20	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane *120 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *118 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 4 (H232498-03)

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	05/18/2023	ND	1.99	99.6	2.00	6.93	
Toluene*	<0.050	0.050	05/18/2023	ND	2.04	102	2.00	7.27	
Ethylbenzene*	<0.050	0.050	05/18/2023	ND	1.98	99.1	2.00	5.84	
Total Xylenes*	<0.150	0.150	05/18/2023	ND	6.07	101	6.00	6.60	
Total BTEX	<0.300	0.300	05/18/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	384	96.0	400	8.00	

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	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 *94.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *100 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 5 (H232498-04)

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	05/18/2023	ND	1.99	99.6	2.00	6.93	
Toluene*	<0.050	0.050	05/18/2023	ND	2.04	102	2.00	7.27	
Ethylbenzene*	<0.050	0.050	05/18/2023	ND	1.98	99.1	2.00	5.84	
Total Xylenes*	<0.150	0.150	05/18/2023	ND	6.07	101	6.00	6.60	
Total BTEX	<0.300	0.300	05/18/2023	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	**112**	16.0	05/18/2023	ND	384	96.0	400	8.00	

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	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 *91.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *95.7 %* *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:	05/17/2023	Sampling Date:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 7 (H232498-05)

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	05/18/2023	ND	1.99	99.6	2.00	6.93	
Toluene*	<0.050	0.050	05/18/2023	ND	2.04	102	2.00	7.27	
Ethylbenzene*	<0.050	0.050	05/18/2023	ND	1.98	99.1	2.00	5.84	
Total Xylenes*	<0.150	0.150	05/18/2023	ND	6.07	101	6.00	6.60	
Total BTEX	<0.300	0.300	05/18/2023	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	**272**	16.0	05/18/2023	ND	384	96.0	400	8.00	

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	05/18/2023	ND	185	92.6	200	6.28	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	187	93.6	200	6.63	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *107 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *120 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 8 (H232498-06)

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	05/18/2023	ND	1.99	99.6	2.00	6.93	
Toluene*	<0.050	0.050	05/18/2023	ND	2.04	102	2.00	7.27	
Ethylbenzene*	<0.050	0.050	05/18/2023	ND	1.98	99.1	2.00	5.84	
Total Xylenes*	<0.150	0.150	05/18/2023	ND	6.07	101	6.00	6.60	
Total BTEX	<0.300	0.300	05/18/2023	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	**720**	16.0	05/18/2023	ND	384	96.0	400	8.00	

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	05/18/2023	ND	185	92.6	200	6.28	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	187	93.6	200	6.63	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *101 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 9 (H232498-07)

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 *109 %* *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	384	96.0	400	8.00	

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	05/18/2023	ND	185	92.6	200	6.28	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	187	93.6	200	6.63	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *102 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 10 (H232498-08)

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 *103 %* *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	**1500**	16.0	05/18/2023	ND	416	104	400	3.77	QM-07

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	185	92.6	200	6.28	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	187	93.6	200	6.63	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *81.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.5 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 12 (H232498-09)

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 *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	**192**	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	185	92.6	200	6.28	
DRO >C10-C28*	<10.0	10.0	05/18/2023	ND	187	93.6	200	6.63	
EXT DRO >C28-C36	<10.0	10.0	05/18/2023	ND					

Surrogate: 1-Chlorooctane *90.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.8 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 13 (H232498-10)

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 *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	**1340**	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 *78.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *74.1 %* *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

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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 14 (H232498-11)

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 *103 %* *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	**2520**	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 *68.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *66.2 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 15 (H232498-12)

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	2.24	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	**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 *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: SW - 2 (H232498-13)

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	2.24	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	**352**	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 *102 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *98.7 %* *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:	05/17/2023	Sampling Date:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: SW - 4 (H232498-14)

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	2.24	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	**1040**	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 *73.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.9 %* *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:	05/12/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: SW - 6 (H232498-15)

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	2.24	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	**384**	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 *81.5 %* *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

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.
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 #:	702520.045.01	Project Owner: Matador	City:
Project Name:	PickardState2h		State: Zip:
Project Location:	Eddy		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
H232198											✓						
1	C-2	G	C			✓					X		05/12/2	0823	✓	✓	✓
2	C-3					✓								0829	✓	✓	✓
3	C-4					✓								0836	✓	✓	✓
4	C-5					✓								0839	✓	✓	✓
5	C-7					✓								0844	✓	✓	✓
6	C-8					✓								0852	✓	✓	✓
7	C-9					✓								0900	✓	✓	✓
8	C-10					✓								0906	✓	✓	✓
9	C-12					✓								0911	✓	✓	✓
10	C-13					✓								0914	✓	✓	✓

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) SR	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	**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 #: 702520.045.01 Project Owner: Matador	City:
Project Name: PickardState2h	State: Zip:
Project Location: Eddy	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	CL	BTEX	TPH
H232498																	
11	C-14	G	C			✓					✓		05/12/23	0918	✓	✓	✓
12	C-15	↓	↓			✓					↓		↓	0920	✓	✓	✓
13	SW-2					✓								0923	✓	✓	✓
14	SW-4					✓								0929	✓	✓	✓
15	SW-6					✓								0931	✓	✓	✓

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 -1.4°C / -2.0°C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials) SR	REMARKS: 2.21

+ 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 09, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: PICKARD STATE 2H

Enclosed are the results of analyses for samples received by the laboratory on 06/05/23 11:40.

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:	06/05/2023	Sampling Date:	05/31/2023
Reported:	06/09/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 14 1' (H232833-01)

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	06/06/2023	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	06/06/2023	ND	2.01	100	2.00	3.43	
Ethylbenzene*	<0.050	0.050	06/06/2023	ND	1.96	97.8	2.00	3.27	
Total Xylenes*	<0.150	0.150	06/06/2023	ND	5.91	98.6	6.00	3.78	
Total BTEX	<0.300	0.300	06/06/2023	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	**528**	16.0	06/06/2023	ND	432	108	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	06/06/2023	ND	191	95.7	200	0.162	
DRO >C10-C28*	<10.0	10.0	06/06/2023	ND	171	85.4	200	0.176	
EXT DRO >C28-C36	<10.0	10.0	06/06/2023	ND					

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

Surrogate: 1-Chlorooctadecane *85.5 %* *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:	06/05/2023	Sampling Date:	05/31/2023
Reported:	06/09/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 13 1' (H232833-02)

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	06/06/2023	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	06/06/2023	ND	2.01	100	2.00	3.43	
Ethylbenzene*	<0.050	0.050	06/06/2023	ND	1.96	97.8	2.00	3.27	
Total Xylenes*	<0.150	0.150	06/06/2023	ND	5.91	98.6	6.00	3.78	
Total BTEX	<0.300	0.300	06/06/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**528**	16.0	06/06/2023	ND	432	108	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	06/06/2023	ND	191	95.7	200	0.162	
DRO >C10-C28*	<10.0	10.0	06/06/2023	ND	171	85.4	200	0.176	
EXT DRO >C28-C36	<10.0	10.0	06/06/2023	ND					

Surrogate: 1-Chlorooctane *104 %* *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:	06/05/2023	Sampling Date:	05/31/2023
Reported:	06/09/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 10 1' (H232833-03)

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	06/06/2023	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	06/06/2023	ND	2.01	100	2.00	3.43	
Ethylbenzene*	<0.050	0.050	06/06/2023	ND	1.96	97.8	2.00	3.27	
Total Xylenes*	<0.150	0.150	06/06/2023	ND	5.91	98.6	6.00	3.78	
Total BTEX	<0.300	0.300	06/06/2023	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	**384**	16.0	06/06/2023	ND	432	108	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	06/06/2023	ND	191	95.7	200	0.162	
DRO >C10-C28*	<10.0	10.0	06/06/2023	ND	171	85.4	200	0.176	
EXT DRO >C28-C36	<10.0	10.0	06/06/2023	ND					

Surrogate: 1-Chlorooctane *114 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *119 %* *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:	06/05/2023	Sampling Date:	05/31/2023
Reported:	06/09/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: C - 8 1' (H232833-04)

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	06/06/2023	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	06/06/2023	ND	2.01	100	2.00	3.43	
Ethylbenzene*	<0.050	0.050	06/06/2023	ND	1.96	97.8	2.00	3.27	
Total Xylenes*	<0.150	0.150	06/06/2023	ND	5.91	98.6	6.00	3.78	
Total BTEX	<0.300	0.300	06/06/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**288**	16.0	06/06/2023	ND	432	108	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	06/06/2023	ND	191	95.7	200	0.162	
DRO >C10-C28*	<10.0	10.0	06/06/2023	ND	171	85.4	200	0.176	
EXT DRO >C28-C36	<10.0	10.0	06/06/2023	ND					

Surrogate: 1-Chlorooctane *107 %* *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:	06/05/2023	Sampling Date:	05/31/2023
Reported:	06/09/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	MATADOR - EDDY COUNTY, NM		

Sample ID: SW - 4 1' (H232833-05)

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	06/06/2023	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	06/06/2023	ND	2.01	100	2.00	3.43	
Ethylbenzene*	<0.050	0.050	06/06/2023	ND	1.96	97.8	2.00	3.27	
Total Xylenes*	<0.150	0.150	06/06/2023	ND	5.91	98.6	6.00	3.78	
Total BTEX	<0.300	0.300	06/06/2023	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	**240**	16.0	06/06/2023	ND	432	108	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	06/06/2023	ND	191	95.7	200	0.162	
DRO >C10-C28*	<10.0	10.0	06/06/2023	ND	171	85.4	200	0.176	
EXT DRO >C28-C36	<10.0	10.0	06/06/2023	ND					

Surrogate: 1-Chlorooctane *99.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *105 %* *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

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 #: 702520.045.01	Project Owner: Matador	City:	
Project Name: PickardState2h		State: Zip:	
Project Location: EDDY		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
H232833																		
1	C-14 1'	C	1			☑						☑		5-31-23	1240	☑	☑	☑
2	C-13 1'	C	1			☑						☑		5-31-23	1305	☑	☑	☑
3	C-10 1'	C	1			☑						☑			1315	☑	☑	☑
4	C-8 1'	C	1			☑						☑			1320	☑	☑	☑
5	SW-4 1'	C	1			☑						☑			1342	☑	☑	☑
						☐						☐				☐	☐	☐
						☐						☐				☐	☐	☐
						☐						☐				☐	☐	☐
						☐						☐				☐	☐	☐
						☐						☐				☐	☐	☐

Relinquished By:	Date: 05.23	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1140		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)	#113	Sample Condition Cool / Intact	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	0.3c / -0.3c	☑ Yes ☑ Yes ☐ No ☐ No	

+ 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

February 07, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: PICKARD STATE 2H

Enclosed are the results of analyses for samples received by the laboratory on 02/06/23 12:26.

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:	02/06/2023	Sampling Date:	01/31/2023
Reported:	02/07/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY COUNTY, NM		

Sample ID: S - 1 (H230501-01)

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	02/07/2023	ND	2.02	101	2.00	5.67	
Toluene*	<0.050	0.050	02/07/2023	ND	2.00	100	2.00	6.20	
Ethylbenzene*	<0.050	0.050	02/07/2023	ND	1.96	98.0	2.00	6.49	
Total Xylenes*	<0.150	0.150	02/07/2023	ND	5.91	98.5	6.00	7.29	
Total BTEX	<0.300	0.300	02/07/2023	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	**10800**	16.0	02/06/2023	ND	416	104	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	02/06/2023	ND	196	97.9	200	1.56	
DRO >C10-C28*	<10.0	10.0	02/06/2023	ND	197	98.6	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	02/06/2023	ND					

Surrogate: 1-Chlorooctane *91.6 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

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:	02/06/2023	Sampling Date:	01/31/2023
Reported:	02/07/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY COUNTY, NM		

Sample ID: S - 2 (H230501-02)

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	02/07/2023	ND	2.02	101	2.00	5.67	
Toluene*	<0.050	0.050	02/07/2023	ND	2.00	100	2.00	6.20	
Ethylbenzene*	<0.050	0.050	02/07/2023	ND	1.96	98.0	2.00	6.49	
Total Xylenes*	<0.150	0.150	02/07/2023	ND	5.91	98.5	6.00	7.29	
Total BTEX	<0.300	0.300	02/07/2023	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	**3520**	16.0	02/06/2023	ND	416	104	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	02/06/2023	ND	196	97.9	200	1.56	
DRO >C10-C28*	<10.0	10.0	02/06/2023	ND	197	98.6	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	02/06/2023	ND					

Surrogate: 1-Chlorooctane *94.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *105 %* *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:	02/06/2023	Sampling Date:	01/31/2023
Reported:	02/07/2023	Sampling Type:	Soil
Project Name:	PICKARD STATE 2H	Sampling Condition:	Cool & Intact
Project Number:	702520.045.01	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY COUNTY, NM		

Sample ID: S - 3 (H230501-03)

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	02/07/2023	ND	2.02	101	2.00	5.67	
Toluene*	<0.050	0.050	02/07/2023	ND	2.00	100	2.00	6.20	
Ethylbenzene*	<0.050	0.050	02/07/2023	ND	1.96	98.0	2.00	6.49	
Total Xylenes*	<0.150	0.150	02/07/2023	ND	5.91	98.5	6.00	7.29	
Total BTEX	<0.300	0.300	02/07/2023	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	**1710**	16.0	02/06/2023	ND	416	104	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	02/06/2023	ND	196	97.9	200	1.56	
DRO >C10-C28*	<10.0	10.0	02/06/2023	ND	197	98.6	200	1.98	
EXT DRO >C28-C36	<10.0	10.0	02/06/2023	ND					

Surrogate: 1-Chlorooctane *86.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.0 %* *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

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	**BILL TO**	
Project Manager:	Chad Hensley	P.O. #:	
Address:	408 W. Texas Ave	Company:	
City:	Artesia	State: NM Zip: 88210	Attn:
Phone #:	575.746.8768	Fax #:	Address:
Project #:	702520.045.01	Project Owner: Matt Gomez	City:
Project Name:	Pickard State 2H		State: Zip:
Project Location:	Eddy County, NM		Phone #:
Sampler Name:	Chad Hensley		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
H230501																	
1	S-1	G	1			X							1/31/23	09:23	✓	✓	✓
2	S-2	G	1			X							1/31/23	09:34	✓	✓	✓
3	S-3	G	1			X							1/31/23	09:99	✓	✓	✓

Relinquished By: Chad Hensley	Date: 2/6/23 Time: 1226	Received By: S 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: 3.1: C-O-C 2.5: #113	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) SR	REMARKS:

† 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 262872

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 262872
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	9/26/2023