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TALON LPE

Closure Report

Arco 5 Federal #001
Eddy County, New Mexico
API ID # 30-015-26197
Incident # NMCS0314035527

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

January 15, 2024

NMOCD
506 W. Texas Ave
Artesia, NM 88210

BLM
620 E. Greene St.
Carlsbad, NM 88220

Subject: **Closure Report**
Arco 5 Federal #001
Eddy County, New Mexico
API # 30-015-26197
Incident # NMCS0314035527

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, and the closure request are presented herein.

Site Information

The Arco 5 Federal #001 is located approximately 5.6 miles southeast of Loco Hills, New Mexico. The legal location for this release is Unit Letter E, Section 05, Township 18 South and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.7791405, -103.897789. A Site 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 Kermit-Berino fine sands with 0 to 3 percent slopes. The referenced soil data is presented in Appendix II. Per the New Mexico Bureau of Geology and Mineral Resources, the local geology consists of eolian and piedmont deposits, Holocene to middle Pleistocene in age.

Groundwater and Site Characterization

Based on the New Mexico Office of the State Engineer Database, the nearest reported groundwater depth is 430 feet below ground surface (bgs) but is located greater than 0.5 miles from the subject site. The FEMA Flood Service Center does locate the site in a 100-year flood plain. Further research of the Bureau of Land Management Karst data indicates that this site is situated within a low potential Karst area. See Appendix II for the site characterization data.

Site Characterization	
What is the shallowest depth to groundwater beneath the area affected by the release? (ft bgs)	430 ft
What method was used to determine the depth to ground water?	Estimate
Did the release impact groundwater or surface water?	No
Distance from a flowing watercourse or any other significant watercourse. (mi)	0.08 mi
Distance from any lakebed, sinkhole, or playa lake. (mi)	1.0 mi
Distance from an occupied permanent residence, school, hospital, institution, or church. (mi)	5.2 mi
Distance from a spring or private domestic fresh water well used by less that five households for domestic or stock watering purposes. (mi)	2.6 mi
Distance from any fresh water well or spring. (mi)	4.2 mi
Distance from incorporated municipal boundries or a defined municipal fresh water field. (mi)	5.2 mi
Distance from a wetland. (mi)	0.06 mi
Distance from a subsurface mine. (mi)	8.4 mi
Distance from (non-karst) unstable area. (mi)	21.9 mi
Categorize the risk of this well/site being in a karst geology.	Low
Distance from a 100 year flooplain. (mi)	0.04 mi
Did the release impact areas not on an exploration, development, production, or storage site?	No

Groundwater and Site Characterization (Continued)

With no depth to water source available that meets New Mexico Oil Conservation Division's (NMOCD) criteria within ½ mile of the site, the responsible party must therefore adhere to the cleanup criteria for this site of groundwater less than 50 feet bgs, Table I, NMOCD Rule 19.15.29 NMAC.

Table I
Closure Criteria for Soils Impacted by a Release

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

Incident Description

Matador personnel noted a historical spill had been reported on April 21, 2003, that needed to be addressed. The C-141 submitted to the NMOCD, incident number NMCS0314035527, stated a hole was noted in the bottom of a heater treater, resulting in the release of seventy barrels (bbls) of crude oil being released to the site. One (1) bbl of crude oil was recovered. The site map is presented in Appendix I.

Site Assessment

On December 13, 2022, Talon personnel mobilized to the site to conduct an initial site assessment of the area where the former heater treater resided. The impacted area was photographed, sampled utilizing a hand auger, and mapped. All soil samples were properly packaged, preserved on ice, and transported to Cardinal laboratories with the chain of custody for analysis of Total Chlorides (Method SM4500Cl-B), Total Petroleum Hydrocarbons (TPH, EPA Method 8015M), and Volatile Organics (BTEX, EPA Method 8021B). Sample locations are shown on the attached assessment map, Figure 2 (Appendix I) and the analytical results of our sampling event are presented in the following data table.

Table 1

Site Assessment

Arco 5 Federal #001									
Sample ID	**Sample Date**	**Depth (BGS)**	**Benzene mg/kg**	**BTEX mg/kg**	**GRO mg/kg**	**DRO mg/kg**	**MRO mg/kg**	**Total TPH mg/kg**	**Chlorides mg/kg**
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			**10 mg/kg**	**50 mg/kg**	**DRO + GRO + MRO combined = 100 mg/kg**			**100 mg/kg**	**600 mg/kg**
S-1	12/13/22	0'	ND	0.00102	ND	228	ND	228	6.6
	12/13/22	1'	ND	ND	26.5	ND	ND	26.5	3.2
	12/13/22	2'	0.000735	0.00803	ND	ND	ND	-	5.1
	12/13/22	3'	ND	0.00198	ND	ND	ND	-	6.0
	12/13/22	4'	0.00499	0.00293	33.8	ND	ND	33.8	6.0
S-2	12/13/22	0'	0.000483	0.00248	26.6	ND	ND	26.6	13.8
	12/13/22	1'	0.00491	0.0124	ND	15.3	ND	15.3	6.8
	12/13/22	2'	ND	ND	31.0	ND	ND	31.0	12.4
	12/13/22	3'	ND	ND	ND	20.8	ND	20.8	26.8
	12/13/22	4'	ND	ND	25.6	ND	ND	25.6	40.9
S-3	12/13/22	0'	ND	ND	ND	ND	ND	-	2.8
	12/13/22	1'	0.000425	0.00132	ND	ND	ND	-	4.5
	12/13/22	2'	ND	ND	46.5	16.2	ND	62.7	4.5
	12/13/22	3'	ND	ND	48.7	16.5	ND	65.2	4.6
	12/13/22	4'	ND	ND	36.5	ND	ND	36.5	4.8

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
ND	Analyte Not Detected

Highlighted cells indicate exceedance of NMOCD Table 1 Closure Criteria

Remediation Activities

On Februrary 10, 2023, Talon personnel returned to location to remove impacted soils located within the suspected historical release area. Contaminates were excavated to two (2) feet bgs, and a confimation sample was 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 July 28, 2023, Talon personnel returned to location to take an additional sample at confirmation sample location C-1. The composite sample was taken and 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 analysis are summarized in the data table below. Sample locations are illustrated on Figure 3 in Appendix I and complete laboratory analytical reports are presented in Appendix V.

Table 2
Confirmation Samples

Arco 5 Fed #1									
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	2/10/23	2'	ND	ND	ND	1450	466	1916	16
	7/28/23	2'	ND	ND	ND	ND	ND	0	80

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
C	Confirmation Sample
ND	Analyte Not Detected

Highlighted cells indicate exceedance of NMOCD Table 1 Closure Criteria

Regulatory Response

On September 26, 2023, the NMOCD denied the submitted closure report. The NMOCD stated that per 19.15.29.12 E(1)b "photographs of the remediated site prior to backfill" were not included in the submitted report for closure. The submitted closure report does not provide details of the volume of impacted soil removed or where the impacted soil was transported to for disposal. In the submitted report, final excavation measurements are not provided. The report indicates that the excavation had a depth of 2 feet bgs. However, the length and width of the excavation are not mentioned. This makes it difficult to determine if an adequate amount of closure samples were collected. Only one confirmation sample, C-1 dated 7/28/2023, was submitted for closure.

Corrective Action

On December 21, 2023, Talon personnel returned to the subject location to and excavated the historical release area to a depth of two and one tenth (2.1) feet bgs. Confirmation samples were collected and the excavation was photographed. All soil samples were packaged in laboratory provided glassware, preserved on ice, and transported with the chain of custody to Envirotech, Inc., in Farmington, New Mexico for analysis of Total Chlorides (EPA Method 300.0), Total Petroleum Hydrocarbons (TPH, EPA Method 8015D) and Volatile Organics (BTEX, EPA Method 8021B). The analytical results from the laboratory analyses are summarized below in Table 3.

Table 3
Confirmation Samples

Arco 5 Federal #001										
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**	**Field Titrations**
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**	**Chlorides**
C-1	12/21/23	2.1'	ND	ND	ND	ND	ND	ND	ND	ND
SW-1	12/21/23	0-2’	ND	ND	ND	ND	ND	ND	ND	ND
SW-2	12/21/23	0-2’	ND	ND	ND	ND	ND	ND	ND	ND
SW-3	12/21/23	0-2’	ND	ND	ND	ND	ND	ND	ND	ND
SW-4	12/21/23	0-2’	ND	ND	ND	ND	ND	ND	ND	ND

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
C	Confirmation Sample
SW	Sidewall Sample
ND	Analyte Not Detected

Highlighted cells indicate exceedance of NMOCD Table 1 Closure Criteria

Remedial Action Summary

- The impacted area (10 x 10 feet) was excavated to depth of 2.1 feet bgs. Talon utilized a PD and field titrated soil samples for total chlorides to guide the vertical and horizontal extents of the excavation process.
- Pursuant to NMOCD guidance, confirmation soil samples were collected at 200 square foot intervals and analyzed for TPH, BTEX and Total Chlorides to insure all areas had reached NMOCD closure criteria.
- Approximately 7.7 cu/yds of contaminated soil was transported to LeaLand for disposal.
- The excavated areas were backfilled with new, like material (calichie), 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

On behalf of Matador Resources, we respectfully request that no further actions be required and that closure of this incident be granted.

Respectfully submitted,

Talon/LPE

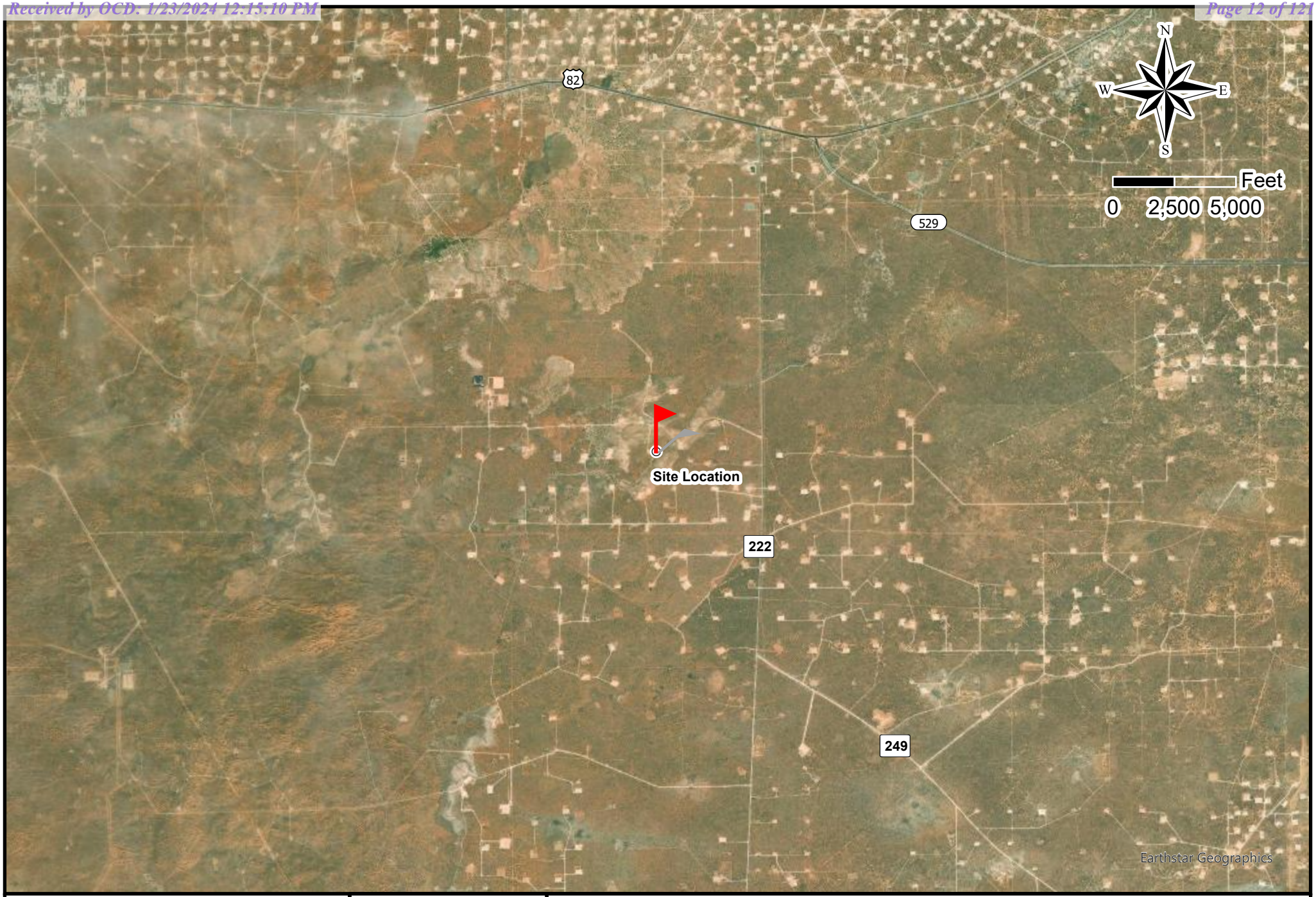
Chad Hensley
Project Manager

Attachments:

Appendix I	Site Maps
Appendix II	Groundwater Data, Soil Survey, FEMA Flood Map
Appendix III	C-141 Form
Appendix IV	Photographic Documentation
Appendix V	Laboratory Report

Appendix I

Site Maps



TALON LPE

Drafted: 2/27/2023
1 in = 5,000 ft
Drafted By: IJR

Matador Production Co.
Arco 5 Federal #001
Eddy County, NM
Site Map

TALON LPE

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

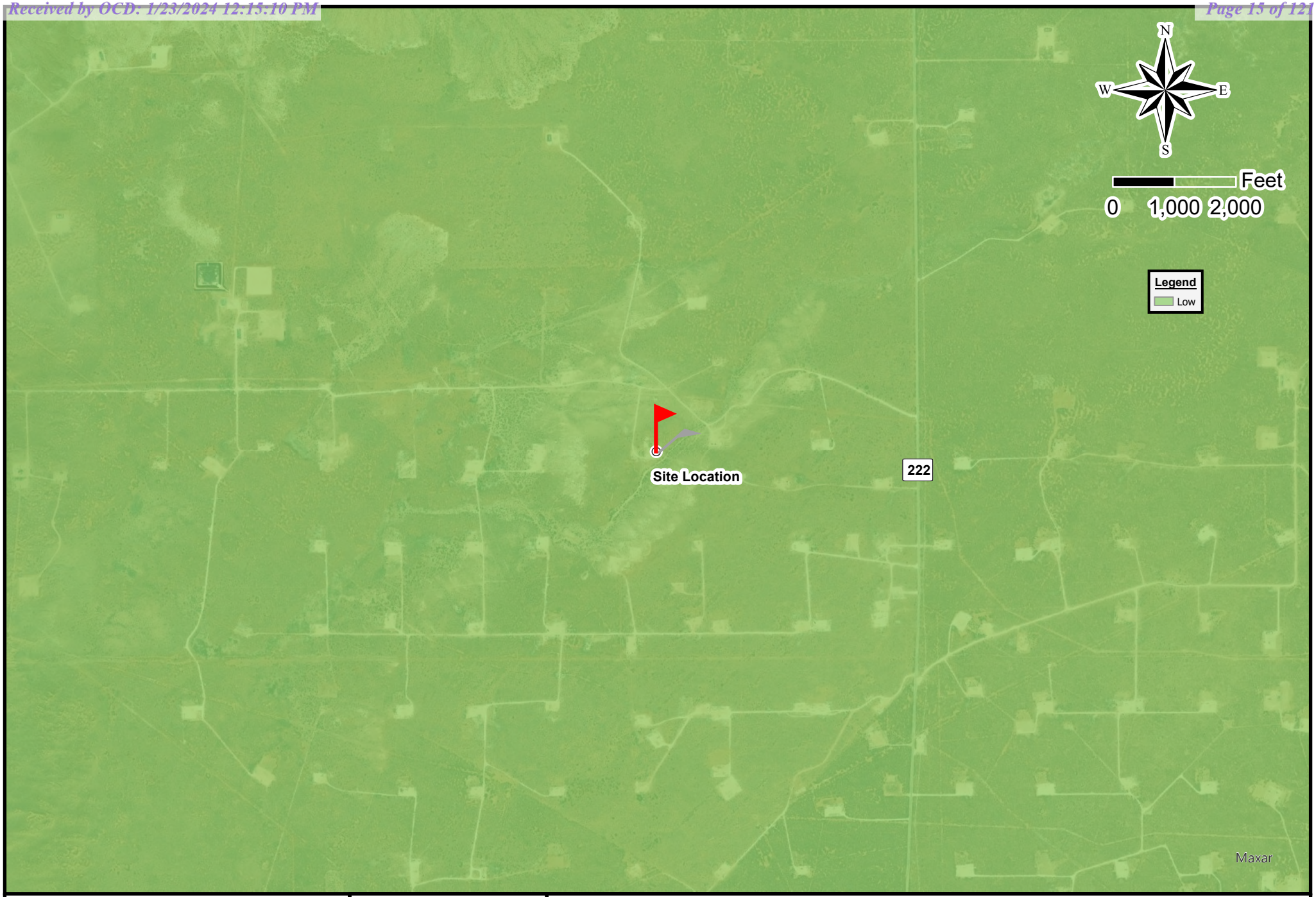
Figure 2

Matador Production Co.
Arco 5 Federal #001
Eddy County, NM
Assessment Map

TALON LPE

Drafted: 12/22/2023
1 in = 10 ft
Drafted By: JAI

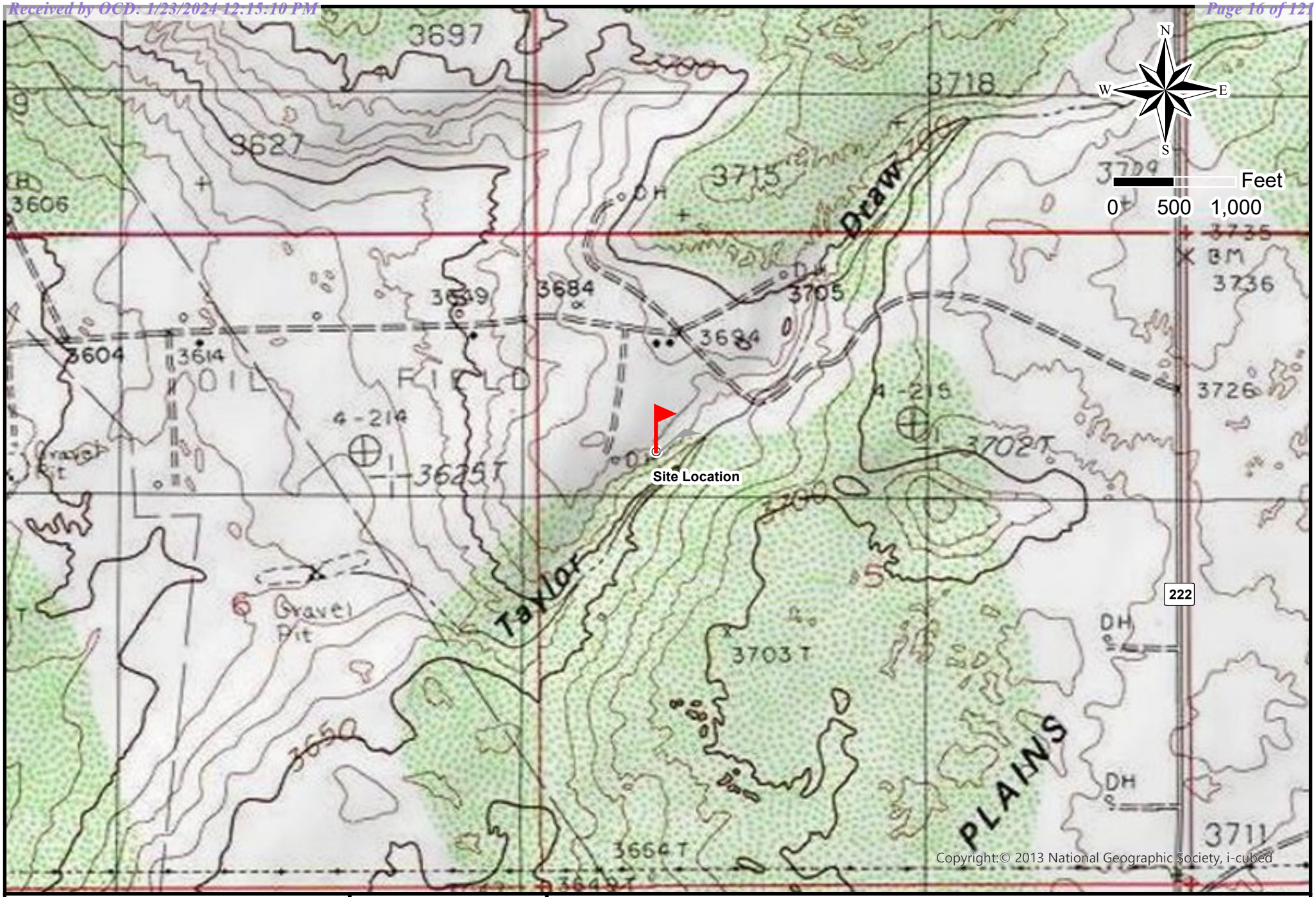
Matador Resources
Arco 5 Federal #001
32.77874, -103897140
Eddy County, NM
Confirmation Map



TALON LPE

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

Matador Production Co.
Arco 5 Federal #001
Eddy County, NM
Karst Map



TALON LPE	Drafted: 2/27/2023 1 in = 1,000 ft Drafted By: IJR	Matador Production Co. Arco 5 Federal #001 Eddy County, NM Topographic Map

Appendix II

Groundwater Data

Soil Survey

FEMA Flood Map

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

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

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

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 11590 POD1		RA	ED	2	1	3	32	17S	31E	603315	3628545	1260	158		
RA 11590 POD4		RA	ED	4	1	1	32	17S	31E	603308	3629253	1967	55		
RA 11590 POD3		RA	ED	3	1	2	32	17S	31E	603932	3629260	2084	60		
RA 13382 POD1		RA	ED	1	3	3	21	17S	31E	604604	3631344	4274	101		
RA 13235 POD1		RA	ED	1	1	1	21	17S	31E	604631	3632537	5426	102		
RA 13213 POD1		RA	CH	2	2	1	24	17S	30E	600489	3632575	5972	101		
RA 13288 POD1		RA	ED	2	3	4	14	17S	30E	599169	3632911	6957	101		
RA 13289 POD1		RA	ED	1	1	2	13	17S	30E	600611	3634171	7377	101		
CP 00818 POD1		CP	LE		1	4	26	18S	30E	599289	3620364*	7981	240		
RA 13212 POD1		RA	CH	1	3	4	11	17S	30E	598984	3634474	8364			
RA 13324 POD1		RA	ED	4	4	1	10	17S	31E	606711	3635310	8733	55		
CP 00767 POD1		CP	ED		3	2	35	18S	30E	599300	3619158*	9042	500		
CP 00672		CP	LE		4	4	07	18S	32E	612475	3624947*	9504	524	430	94
CP 00672 CLW475398	O	CP	LE		4	4	07	18S	32E	612475	3624947*	9504	540	460	80
RA 13106 POD2		RA	ED	4	2	3	01	17S	30E	600406	3636426	9576			
RA 13106 POD3		RA	ED	4	2	3	01	17S	30E	600381	3636421	9578			
RA 13234 POD1		RA	LE	1	4	1	19	17S	32E	611435	3632294	9585	104		
RA 11914 POD1		RA	ED	2	4	2	20	17S	30E	594801	3632002	9687	85	80	5
CP 00853 POD1	O	CP	ED		2	4	28	18S	30E	596472	3620340*	9714	350		
CP 00849 POD1		CP	LE	3	1	3	35	18S	31E	608012	3618757*	9762	300		
RA 13319 POD1		RA	ED	3	3	3	02	17S	30E	598254	3635919	9980			

Average Depth to Water: **323 feet**
Minimum Depth: **80 feet**
Maximum Depth: **460 feet**

Record Count: 21

UTMNAD83 Radius Search (in meters):

Easting (X): 603262.7 **Northing (Y):** 3627286.33 **Radius:** 10000

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

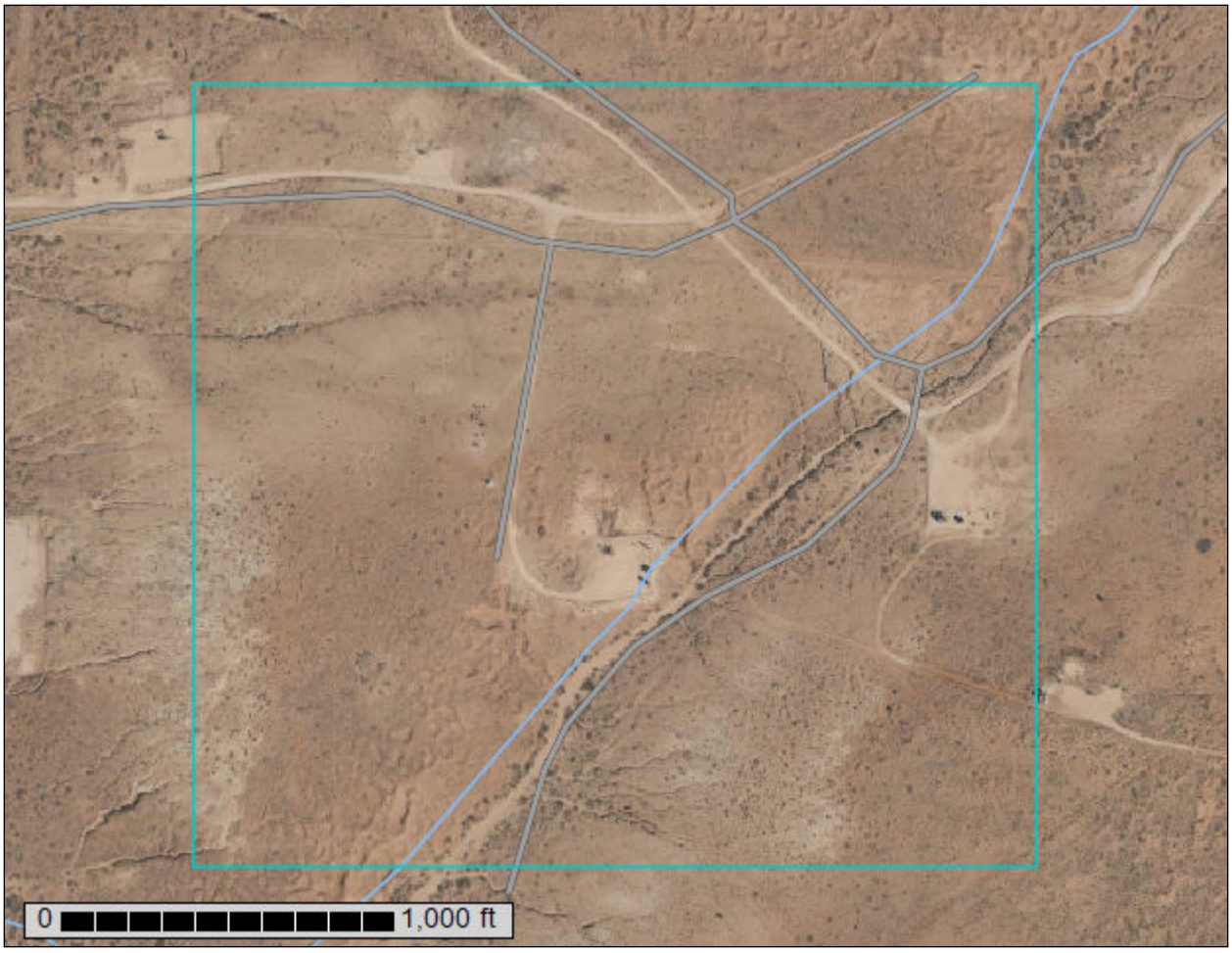
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Eddy Area, New Mexico



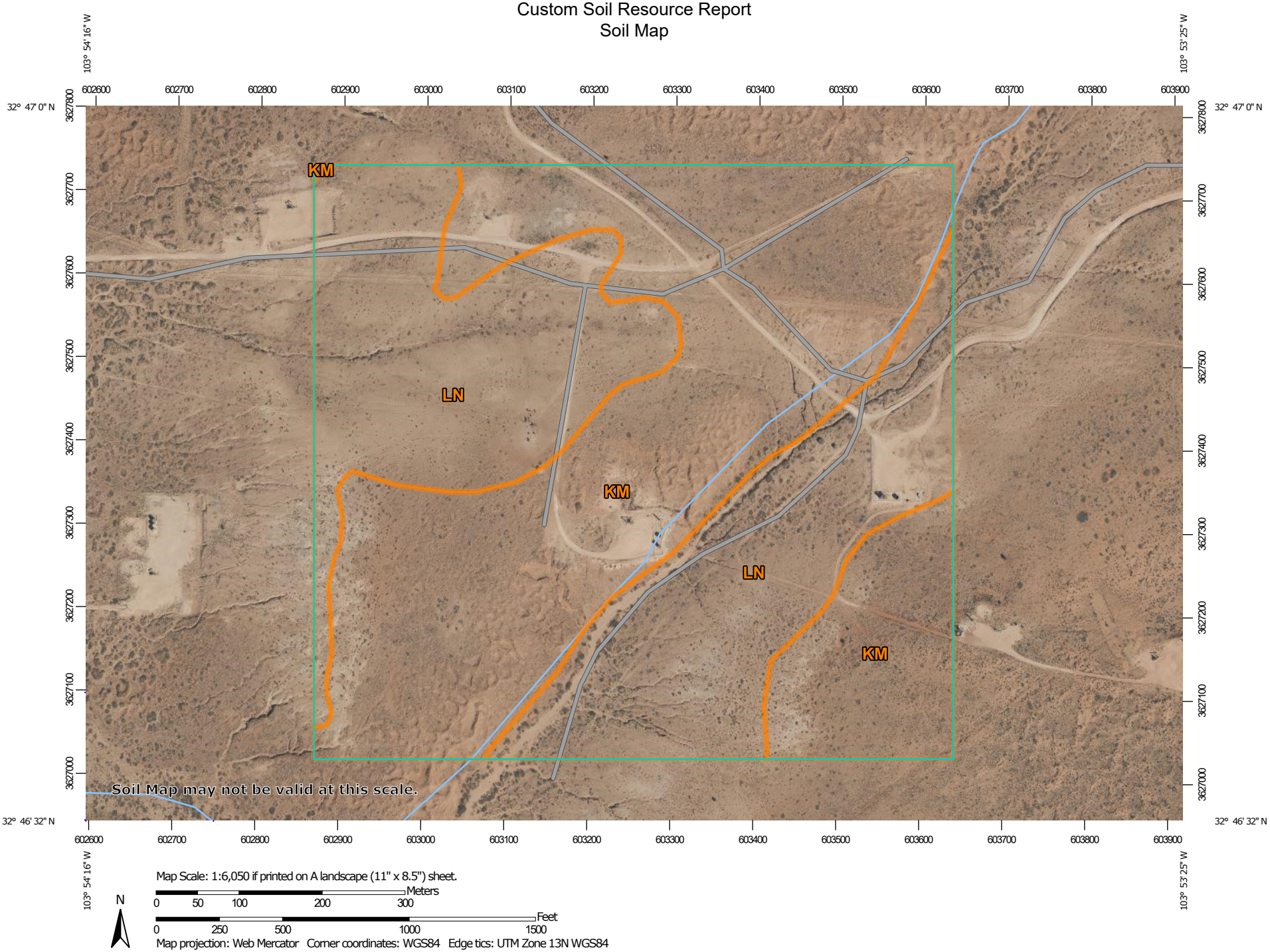
September 8, 2023

Contents

Soil Map

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

Custom Soil Resource Report
Soil Map



MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 18, Sep 8, 2022

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

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

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KM	Kermit-Berino fine sands, 0 to 3 percent slopes	76.4	56.1%
LN	Largo-Stony land complex, 0 to 25 percent slopes	59.8	43.9%
Totals for Area of Interest		**136.2**	**100.0%**

Map Unit Descriptions

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

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

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

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

onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Eddy Area, New Mexico

KM—Kermit-Berino fine sands, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w4q
Elevation: 3,100 to 4,200 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 190 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition

Kermit and similar soils: 50 percent
Berino and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kermit

Setting

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

Typical profile

H1 - 0 to 7 inches: fine sand
H2 - 7 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
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: 1.0
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 Berino

Setting

Landform: Plains, fan piedmonts
Landform position (three-dimensional): Riser

Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile
H1 - 0 to 17 inches: fine sand
H2 - 17 to 50 inches: fine sandy loam
H3 - 50 to 58 inches: loamy sand

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups
Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Active dune land
Percent of map unit: 15 percent
Hydric soil rating: No

LN—Largo-Stony land complex, 0 to 25 percent slopes

Map Unit Setting
National map unit symbol: 1w50
Elevation: 2,000 to 5,700 feet
Mean annual precipitation: 6 to 14 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition
Largo and similar soils: 41 percent
Stony land: 40 percent

Minor components: 19 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Largo

Setting

Landform: Plains, alluvial fans
Landform position (three-dimensional): Talf, rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Calcareous alluvium

Typical profile

H1 - 0 to 4 inches: loam
H2 - 4 to 47 inches: silt loam
H3 - 47 to 65 inches: loam

Properties and qualities

Slope: 1 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 (0.20 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: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 7 percent
Ecological site: R070BD002NM - Shallow Sandy
Hydric soil rating: No

Pajarito

Percent of map unit: 6 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Largo

Percent of map unit: 6 percent
Ecological site: R070BC017NM - Bottomland
Hydric soil rating: No

National Flood Hazard Layer FIRMette

FEMA

103°54'11"W 32°47'N

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

1:6,000

103°53'33"W 32°46'30"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

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

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

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

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

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

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

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/8/2023 at 1:21 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Appendix III

C-141 Forms

NMOCD Correspondence

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NMCS0314035527
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Matador Resources	OGRID	228937
Contact Name	Clinton Talley	Contact Telephone	337-319-8398
Contact email	clinton.talley@matadorresources.com	Incident # *(assigned by OCD)*	NMCS0314035527
Contact mailing address	5347 N. 26th Street 2nd Floor, Artesia, NM 88210		

Location of Release Source

Latitude 32.7791405 Longitude -103.897789
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	ARCO 5 FEDERAL #001	Site Type	Oil Release
Date Release Discovered	04/21/2003	API# *(if applicable)*	30-015-26197

Unit Letter	Section	Township	Range	County
E	05	18S	31E	Eddy

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

Nature and Volume of Release

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

☑ Crude Oil	Volume Released (bbls) 70	Volume Recovered (bbls) 1
☐ 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 (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Hole in bottom of heater treater.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NMCS0314035527
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? NMOCD was contacted on 5/20/2003
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

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

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

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

Printed Name: Clinton Talley Title: EHS

Signature: Clint Talley Date: 1/23/2024

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NMCS0314035527
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?	158 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☑ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NMCS0314035527
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: Clinton Talley Title: EHS

Signature: Clint Talley Date: 1/23/2024

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NMCS0314035527
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: 1/23/2024

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: _____ Date: _____

Printed Name: _____ Title: _____

From: Wells, Shelly, EMNRD
To: Chad Hensley
Cc: Bratcher, Michael, EMNRD; Maxwell, Ashley, EMNRD
Subject: RE: [EXTERNAL] Confirmation Sampling Event
Date: Wednesday, August 9, 2023 4:15:40 PM
Attachments: image001.png
image002.png

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

Good afternoon Chad,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Chad Hensley <chensley@talonlpe.com>
Sent: Wednesday, August 9, 2023 3:26 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Nathaniel Rose <nrose@talonlpe.com>
Subject: [EXTERNAL] Confirmation Sampling Event

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

To whom it may concern,

Talon on behalf of Matador is conducting a sampling event for:
Arco Fed 5
nMCS0314035527
8/11/2023 at 4pm

Chad Hensley
Environmental Project Manager
Office: 575.746.8768 x708
Direct: 575.616.4023
Cell: 575.246.0032
Fax: 575.746.8905

Emergency: 866.742.0742
Web: **www.talonlpe.com**

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

From: Clinton Talley
To: Chad Hensley; Nathaniel Rose
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 295783
Date: Monday, December 18, 2023 1:24:41 PM

Notification for Arco sampling.

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Monday, December 18, 2023 1:23 PM
To: Clinton Talley <clinton.talley@matadorresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 295783

To whom it may concern (c/o Clint Talley for MATADOR PRODUCTION COMPANY),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nMCS0314035527.

The sampling event is expected to take place:

When: 12/21/2023 @ 07:00
Where: E-05-18S-31E 1700 FNL 790 FWL (32.7791405,-103.897789)

Additional Information: N/A

Additional Instructions: 32.7791405, -103.897789

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Appendix IV

Photo Documentation

Arco 5 Federal #001 I Remediation
Lea County, NM

Photograph No.1 Description:	Excavation

Photograph No.2 Description:	Excavation

Arco 5 Federal #001 I Remediation
Lea County, NM

Photograph No.3 Description:	Backfill

Appendix V

Laboratory Reports

CARDINAL Laboratories

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

February 20, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ARCO 5 FED #1

Enclosed are the results of analyses for samples received by the laboratory on 02/15/23 11:45.

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:	02/15/2023	Sampling Date:	02/10/2023
Reported:	02/20/2023	Sampling Type:	Soil
Project Name:	ARCO 5 FED #1	Sampling Condition:	Cool & Intact
Project Number:	702520.040.01	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY COUNTY, NM		

Sample ID: C - 1 @ 2' (H230710-01)

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	02/19/2023	ND	2.17	108	2.00	5.80	
Toluene*	<0.050	0.050	02/19/2023	ND	2.16	108	2.00	5.04	
Ethylbenzene*	<0.050	0.050	02/19/2023	ND	2.14	107	2.00	3.23	
Total Xylenes*	<0.150	0.150	02/19/2023	ND	6.46	108	6.00	3.46	
Total BTEX	<0.300	0.300	02/19/2023	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	**16.0**	16.0	02/16/2023	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	02/17/2023	ND	202	101	200	19.2	
DRO >C10-C28*	**1450**	10.0	02/17/2023	ND	193	96.4	200	18.4	
EXT DRO >C28-C36	**466**	10.0	02/17/2023	ND					

Surrogate: 1-Chlorooctane *97.5 %* *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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
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: Chad Hensley		P.O. #:	
Address: 408 W. Texas Ave		Company:	
City: Artesia	State: NM Zip: 88210	Attn:	
Phone #: 575.746.8768	Fax #:	Address:	
Project #: 702520.040.01	Project Owner:	City:	
Project Name: Arco 5 Fed #1		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
H230710																	
1	C-1 @ 2'	C	1			✓					✓		2/10/23	10:00	✓	✓	✓

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: 2.15.23	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1145		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		
Delivered By: (Circle One)		Sample Condition: Cool ☐ Yes ☐ No / Intact ☐ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	1.9°c / 1.3°c		

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Chad Hensley
Talon/LPE
408 W. Texas St.
Artesia, New Mexico 88210

Generated 12/27/2022 8:43:00 AM

JOB DESCRIPTION

ARCO 5 FED #01
SDG NUMBER Rual County NM

JOB NUMBER

890-3634-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

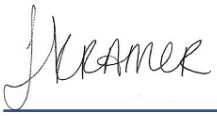
See page two for job notes and contact information.

Eurofins Carlsbad

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Laboratory Job ID: 890-3634-1
SDG: Rual County NM

Table of Contents

Definitions/Glossary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Definitions/Glossary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Case Narrative

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Job ID: 890-3634-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3634-1

Receipt
The samples were received on 12/13/2022 11:22 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: S-1 (890-3634-1), S-1 (890-3634-2), S-1 (890-3634-3), S-1 (890-3634-4), S-1 (890-3634-5), S-2 (890-3634-6), S-2 (890-3634-7), S-2 (890-3634-8), S-2 (890-3634-9), S-2 (890-3634-10), S-3 (890-3634-11), S-3 (890-3634-12), S-3 (890-3634-13), S-3 (890-3634-14) and S-3 (890-3634-15).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-42493 and analytical batch 880-42587 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-1 (890-3634-1), S-1 (890-3634-5), S-2 (890-3634-6), S-2 (890-3634-7), S-2 (890-3634-9), S-3 (890-3634-12), S-3 (890-3634-13), S-3 (890-3634-14) and S-3 (890-3634-15). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-42002 and analytical batch 880-42108 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-42002 and analytical batch 880-42108 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-41843 and analytical batch 880-42078 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-41843/2-A) and (LCSD 880-41843/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-3 (890-3634-14) and S-3 (890-3634-15). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-41843 and analytical batch 880-42078 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-41927 and analytical batch 880-42177 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Case Narrative

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Job ID: 890-3634-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-1

Lab Sample ID: 890-3634-1
Matrix: Solid
Date Collected: 12/13/22 09:22
Date Received: 12/13/22 11:22
Sample Depth: SURFACE

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U F1	0.00201	0.000387	mg/Kg		12/22/22 10:51	12/25/22 09:43	1
Toluene	<0.000458	U F1	0.00201	0.000458	mg/Kg		12/22/22 10:51	12/25/22 09:43	1
Ethylbenzene	<0.000567	U F1	0.00201	0.000567	mg/Kg		12/22/22 10:51	12/25/22 09:43	1
m-Xylene & p-Xylene	**0.00102**	**J F1**	0.00402	0.00101	mg/Kg		12/22/22 10:51	12/25/22 09:43	1
o-Xylene	<0.000345	U F1	0.00201	0.000345	mg/Kg		12/22/22 10:51	12/25/22 09:43	1
Xylenes, Total	**0.00102**	**J F1**	0.00402	0.00101	mg/Kg		12/22/22 10:51	12/25/22 09:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*12/22/22 10:51*	*12/25/22 09:43*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*12/22/22 10:51*	*12/25/22 09:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00102**	**J**	0.00402	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**228**		50.0	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 14:17	1
Diesel Range Organics (Over C10-C28)	**228**		50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 14:17	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*12/16/22 09:37*	*12/18/22 14:17*	*1*
o-Terphenyl	*98*		*70 - 130*	*12/16/22 09:37*	*12/18/22 14:17*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.63**		4.95	0.391	mg/Kg			12/20/22 16:27	1

Client Sample ID: S-1

Lab Sample ID: 890-3634-2
Matrix: Solid
Date Collected: 12/13/22 09:26
Date Received: 12/13/22 11:22
Sample Depth: 1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		12/22/22 10:51	12/25/22 10:03	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		12/22/22 10:51	12/25/22 10:03	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		12/22/22 10:51	12/25/22 10:03	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		12/22/22 10:51	12/25/22 10:03	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		12/22/22 10:51	12/25/22 10:03	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		12/22/22 10:51	12/25/22 10:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*12/22/22 10:51*	*12/25/22 10:03*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-1

Lab Sample ID: 890-3634-2
Matrix: Solid
Date Collected: 12/13/22 09:26
Date Received: 12/13/22 11:22
Sample Depth: 1

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	12/22/22 10:51	12/25/22 10:03	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**26.5**	**J**	49.9	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**26.5**	**J B**	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 14:39	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 14:39	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 14:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	12/16/22 09:37	12/18/22 14:39	1
o-Terphenyl	98		70 - 130	12/16/22 09:37	12/18/22 14:39	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.23**	**J**	5.01	0.396	mg/Kg			12/20/22 16:31	1

Client Sample ID: S-1

Lab Sample ID: 890-3634-3
Matrix: Solid
Date Collected: 12/13/22 09:27
Date Received: 12/13/22 11:22
Sample Depth: 2

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000735**	**J**	0.00202	0.000388	mg/Kg		12/22/22 10:51	12/25/22 10:24	1
Toluene	**0.00245**		0.00202	0.000460	mg/Kg		12/22/22 10:51	12/25/22 10:24	1
Ethylbenzene	**0.00172**	**J**	0.00202	0.000570	mg/Kg		12/22/22 10:51	12/25/22 10:24	1
m-Xylene & p-Xylene	**0.00233**	**J**	0.00403	0.00102	mg/Kg		12/22/22 10:51	12/25/22 10:24	1
o-Xylene	**0.000796**	**J**	0.00202	0.000347	mg/Kg		12/22/22 10:51	12/25/22 10:24	1
Xylenes, Total	**0.00313**	**J**	0.00403	0.00102	mg/Kg		12/22/22 10:51	12/25/22 10:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130	12/22/22 10:51	12/25/22 10:24	1
1,4-Difluorobenzene (Surr)	59	S1-	70 - 130	12/22/22 10:51	12/25/22 10:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00803**		0.00403	0.00102	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			12/19/22 15:23	1

Eurofins Carlsbad

Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-1
Date Collected: 12/13/22 09:27
Date Received: 12/13/22 11:22
Sample Depth: 2

Lab Sample ID: 890-3634-3
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 15:01	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 15:01	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*12/16/22 09:37*	*12/18/22 15:01*	*1*
o-Terphenyl	*85*		*70 - 130*	*12/16/22 09:37*	*12/18/22 15:01*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.12**		5.04	0.398	mg/Kg			12/20/22 16:35	1

Client Sample ID: S-1
Date Collected: 12/13/22 09:31
Date Received: 12/13/22 11:22
Sample Depth: 3

Lab Sample ID: 890-3634-4
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		12/22/22 10:51	12/25/22 10:44	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		12/22/22 10:51	12/25/22 10:44	1
Ethylbenzene	**0.00157**	**J**	0.00200	0.000564	mg/Kg		12/22/22 10:51	12/25/22 10:44	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		12/22/22 10:51	12/25/22 10:44	1
o-Xylene	**0.000409**	**J**	0.00200	0.000343	mg/Kg		12/22/22 10:51	12/25/22 10:44	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		12/22/22 10:51	12/25/22 10:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/22/22 10:51*	*12/25/22 10:44*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/22/22 10:51*	*12/25/22 10:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00198**	**J**	0.00399	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 15:23	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 15:23	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*12/16/22 09:37*	*12/18/22 15:23*	*1*
o-Terphenyl	*87*		*70 - 130*	*12/16/22 09:37*	*12/18/22 15:23*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-1
Date Collected: 12/13/22 09:31
Date Received: 12/13/22 11:22
Sample Depth: 3

Lab Sample ID: 890-3634-4
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.98		4.99	0.394	mg/Kg			12/20/22 16:40	1

Client Sample ID: S-1
Date Collected: 12/13/22 09:32
Date Received: 12/13/22 11:22
Sample Depth: 4

Lab Sample ID: 890-3634-5
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000499	J	0.00199	0.000383	mg/Kg		12/22/22 10:51	12/25/22 11:05	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		12/22/22 10:51	12/25/22 11:05	1
Ethylbenzene	0.000780	J	0.00199	0.000563	mg/Kg		12/22/22 10:51	12/25/22 11:05	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		12/22/22 10:51	12/25/22 11:05	1
o-Xylene	0.00165	J	0.00199	0.000343	mg/Kg		12/22/22 10:51	12/25/22 11:05	1
Xylenes, Total	0.00165	J	0.00398	0.00101	mg/Kg		12/22/22 10:51	12/25/22 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*12/22/22 10:51*	*12/25/22 11:05*	*1*
1,4-Difluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*12/22/22 10:51*	*12/25/22 11:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00293	J	0.00398	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	33.8	J	50.0	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	33.8	J B	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 15:45	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 15:45	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*12/16/22 09:37*	*12/18/22 15:45*	*1*
o-Terphenyl	*99*		*70 - 130*	*12/16/22 09:37*	*12/18/22 15:45*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.96		5.03	0.397	mg/Kg			12/20/22 16:44	1

Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-2

Lab Sample ID: 890-3634-6
Matrix: Solid
Date Collected: 12/13/22 09:41
Date Received: 12/13/22 11:22
Sample Depth: SURFACE

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000483**	**J**	0.00201	0.000387	mg/Kg		12/22/22 10:51	12/25/22 11:26	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		12/22/22 10:51	12/25/22 11:26	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		12/22/22 10:51	12/25/22 11:26	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		12/22/22 10:51	12/25/22 11:26	1
o-Xylene	**0.00200**	**J**	0.00201	0.000346	mg/Kg		12/22/22 10:51	12/25/22 11:26	1
Xylenes, Total	**0.00200**	**J**	0.00402	0.00102	mg/Kg		12/22/22 10:51	12/25/22 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*12/22/22 10:51*	*12/25/22 11:26*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*12/22/22 10:51*	*12/25/22 11:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00248**	**J**	0.00402	0.00102	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**26.6**	**J**	49.9	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**26.6**	**J B**	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 16:07	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 16:07	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*12/16/22 09:37*	*12/18/22 16:07*	*1*
o-Terphenyl	*93*		*70 - 130*	*12/16/22 09:37*	*12/18/22 16:07*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.8**	**F1**	5.04	0.398	mg/Kg			12/20/22 16:49	1

Client Sample ID: S-2

Lab Sample ID: 890-3634-7
Matrix: Solid
Date Collected: 12/13/22 09:45
Date Received: 12/13/22 11:22
Sample Depth: 1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00491**		0.00198	0.000382	mg/Kg		12/22/22 10:51	12/25/22 11:46	1
Toluene	**0.00365**		0.00198	0.000452	mg/Kg		12/22/22 10:51	12/25/22 11:46	1
Ethylbenzene	**0.00109**	**J**	0.00198	0.000561	mg/Kg		12/22/22 10:51	12/25/22 11:46	1
m-Xylene & p-Xylene	<0.00100	U	0.00397	0.00100	mg/Kg		12/22/22 10:51	12/25/22 11:46	1
o-Xylene	**0.00271**		0.00198	0.000341	mg/Kg		12/22/22 10:51	12/25/22 11:46	1
Xylenes, Total	**0.00271**	**J**	0.00397	0.00100	mg/Kg		12/22/22 10:51	12/25/22 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*12/22/22 10:51*	*12/25/22 11:46*	*1*

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Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-2

Date Collected: 12/13/22 09:45
Date Received: 12/13/22 11:22
Sample Depth: 1

Lab Sample ID: 890-3634-7

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*12/22/22 10:51*	*12/25/22 11:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0124**		0.00397	0.00100	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**15.3**	**J**	49.9	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 16:28	1
Diesel Range Organics (Over C10-C28)	**15.3**	**J**	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 16:28	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*12/16/22 09:37*	*12/18/22 16:28*	*1*
o-Terphenyl	*94*		*70 - 130*	*12/16/22 09:37*	*12/18/22 16:28*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.78**		4.99	0.394	mg/Kg			12/20/22 17:02	1

Client Sample ID: S-2

Date Collected: 12/13/22 09:50
Date Received: 12/13/22 11:22
Sample Depth: 2

Lab Sample ID: 890-3634-8

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		12/22/22 10:51	12/25/22 12:07	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		12/22/22 10:51	12/25/22 12:07	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		12/22/22 10:51	12/25/22 12:07	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		12/22/22 10:51	12/25/22 12:07	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		12/22/22 10:51	12/25/22 12:07	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		12/22/22 10:51	12/25/22 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*12/22/22 10:51*	*12/25/22 12:07*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*12/22/22 10:51*	*12/25/22 12:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**31.0**	**J**	50.0	15.0	mg/Kg			12/19/22 15:23	1

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Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-2

Lab Sample ID: 890-3634-8
Matrix: Solid
Date Collected: 12/13/22 09:50
Date Received: 12/13/22 11:22
Sample Depth: 2

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**31.0**	**J B**	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 17:11	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 17:11	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*12/16/22 09:37*	*12/18/22 17:11*	*1*
o-Terphenyl	*83*		*70 - 130*	*12/16/22 09:37*	*12/18/22 17:11*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.4**		4.98	0.393	mg/Kg			12/20/22 17:07	1

Client Sample ID: S-2

Lab Sample ID: 890-3634-9
Matrix: Solid
Date Collected: 12/13/22 09:52
Date Received: 12/13/22 11:22
Sample Depth: 3

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		12/22/22 10:51	12/25/22 12:27	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		12/22/22 10:51	12/25/22 12:27	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		12/22/22 10:51	12/25/22 12:27	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		12/22/22 10:51	12/25/22 12:27	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		12/22/22 10:51	12/25/22 12:27	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		12/22/22 10:51	12/25/22 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*12/22/22 10:51*	*12/25/22 12:27*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*12/22/22 10:51*	*12/25/22 12:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**20.8**	**J**	49.9	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 17:33	1
Diesel Range Organics (Over C10-C28)	**20.8**	**J**	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 17:33	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*12/16/22 09:37*	*12/18/22 17:33*	*1*
o-Terphenyl	*87*		*70 - 130*	*12/16/22 09:37*	*12/18/22 17:33*	*1*

Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-2

Lab Sample ID: 890-3634-9
Matrix: Solid
Date Collected: 12/13/22 09:52
Date Received: 12/13/22 11:22
Sample Depth: 3

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.8**		5.00	0.395	mg/Kg			12/20/22 17:20	1

Client Sample ID: S-2

Lab Sample ID: 890-3634-10
Matrix: Solid
Date Collected: 12/13/22 09:55
Date Received: 12/13/22 11:22
Sample Depth: 4

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		12/22/22 10:51	12/25/22 12:48	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		12/22/22 10:51	12/25/22 12:48	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		12/22/22 10:51	12/25/22 12:48	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		12/22/22 10:51	12/25/22 12:48	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		12/22/22 10:51	12/25/22 12:48	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		12/22/22 10:51	12/25/22 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*12/22/22 10:51*	*12/25/22 12:48*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/22/22 10:51*	*12/25/22 12:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**25.6**	**J**	49.9	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**25.6**	**J B**	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 17:55	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 17:55	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/16/22 09:37*	*12/18/22 17:55*	*1*
o-Terphenyl	*95*		*70 - 130*	*12/16/22 09:37*	*12/18/22 17:55*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40.9**		4.95	0.391	mg/Kg			12/20/22 17:24	1

Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-3

Lab Sample ID: 890-3634-11
Matrix: Solid
Date Collected: 12/13/22 10:08
Date Received: 12/13/22 11:22
Sample Depth: SURFACE

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		12/22/22 10:51	12/25/22 14:11	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		12/22/22 10:51	12/25/22 14:11	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		12/22/22 10:51	12/25/22 14:11	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		12/22/22 10:51	12/25/22 14:11	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		12/22/22 10:51	12/25/22 14:11	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		12/22/22 10:51	12/25/22 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*12/22/22 10:51*	*12/25/22 14:11*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*12/22/22 10:51*	*12/25/22 14:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00401	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 18:17	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 18:17	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*12/16/22 09:37*	*12/18/22 18:17*	*1*
o-Terphenyl	*82*		*70 - 130*	*12/16/22 09:37*	*12/18/22 18:17*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.75**	**J**	5.02	0.397	mg/Kg			12/20/22 17:29	1

Client Sample ID: S-3

Lab Sample ID: 890-3634-12
Matrix: Solid
Date Collected: 12/13/22 10:11
Date Received: 12/13/22 11:22
Sample Depth: 1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000425**	**J**	0.00199	0.000383	mg/Kg		12/22/22 10:51	12/25/22 14:31	1
Toluene	**0.000897**	**J**	0.00199	0.000454	mg/Kg		12/22/22 10:51	12/25/22 14:31	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		12/22/22 10:51	12/25/22 14:31	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		12/22/22 10:51	12/25/22 14:31	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		12/22/22 10:51	12/25/22 14:31	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		12/22/22 10:51	12/25/22 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*12/22/22 10:51*	*12/25/22 14:31*	*1*

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Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-3
Date Collected: 12/13/22 10:11
Date Received: 12/13/22 11:22
Sample Depth: 1

Lab Sample ID: 890-3634-12
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/22/22 10:51*	*12/25/22 14:31*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00132**	**J**	0.00398	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			12/19/22 15:23	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 18:39	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 18:39	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/16/22 09:37	12/18/22 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*12/16/22 09:37*	*12/18/22 18:39*	*1*
o-Terphenyl	*89*		*70 - 130*	*12/16/22 09:37*	*12/18/22 18:39*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.47**	**J**	4.96	0.392	mg/Kg			12/20/22 17:33	1

Client Sample ID: S-3
Date Collected: 12/13/22 10:14
Date Received: 12/13/22 11:22
Sample Depth: 2

Lab Sample ID: 890-3634-13
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		12/22/22 10:51	12/25/22 14:52	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		12/22/22 10:51	12/25/22 14:52	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		12/22/22 10:51	12/25/22 14:52	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		12/22/22 10:51	12/25/22 14:52	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		12/22/22 10:51	12/25/22 14:52	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		12/22/22 10:51	12/25/22 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*12/22/22 10:51*	*12/25/22 14:52*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*12/22/22 10:51*	*12/25/22 14:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**62.7**		50.0	15.0	mg/Kg			12/19/22 15:35	1

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Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-3

Lab Sample ID: 890-3634-13
Matrix: Solid
Date Collected: 12/13/22 10:14
Date Received: 12/13/22 11:22
Sample Depth: 2

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	46.5	J B	50.0	15.0	mg/Kg		12/14/22 15:35	12/17/22 21:28	1
Diesel Range Organics (Over C10-C28)	16.2	J	50.0	15.0	mg/Kg		12/14/22 15:35	12/17/22 21:28	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/14/22 15:35	12/17/22 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/14/22 15:35*	*12/17/22 21:28*	*1*
o-Terphenyl	*120*		*70 - 130*	*12/14/22 15:35*	*12/17/22 21:28*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.52	J	4.99	0.394	mg/Kg			12/20/22 17:38	1

Client Sample ID: S-3

Lab Sample ID: 890-3634-14
Matrix: Solid
Date Collected: 12/13/22 10:17
Date Received: 12/13/22 11:22
Sample Depth: 3

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		12/22/22 10:51	12/25/22 15:12	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		12/22/22 10:51	12/25/22 15:12	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		12/22/22 10:51	12/25/22 15:12	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		12/22/22 10:51	12/25/22 15:12	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		12/22/22 10:51	12/25/22 15:12	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		12/22/22 10:51	12/25/22 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*	*12/22/22 10:51*	*12/25/22 15:12*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*12/22/22 10:51*	*12/25/22 15:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	65.2		49.9	15.0	mg/Kg			12/19/22 15:35	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	48.7	J B	49.9	15.0	mg/Kg		12/14/22 15:35	12/17/22 21:49	1
Diesel Range Organics (Over C10-C28)	16.5	J	49.9	15.0	mg/Kg		12/14/22 15:35	12/17/22 21:49	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/14/22 15:35	12/17/22 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*12/14/22 15:35*	*12/17/22 21:49*	*1*
o-Terphenyl	*131*	*S1+*	*70 - 130*	*12/14/22 15:35*	*12/17/22 21:49*	*1*

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Client Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-3
Date Collected: 12/13/22 10:17
Date Received: 12/13/22 11:22
Sample Depth: 3

Lab Sample ID: 890-3634-14
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.60**	**J**	4.97	0.393	mg/Kg			12/20/22 17:42	1

Client Sample ID: S-3
Date Collected: 12/13/22 10:30
Date Received: 12/13/22 11:22
Sample Depth: 4

Lab Sample ID: 890-3634-15
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		12/22/22 10:51	12/25/22 15:33	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		12/22/22 10:51	12/25/22 15:33	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		12/22/22 10:51	12/25/22 15:33	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		12/22/22 10:51	12/25/22 15:33	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		12/22/22 10:51	12/25/22 15:33	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		12/22/22 10:51	12/25/22 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*12/22/22 10:51*	*12/25/22 15:33*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*12/22/22 10:51*	*12/25/22 15:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			12/26/22 15:56	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**36.5**	**J**	49.9	15.0	mg/Kg			12/19/22 15:35	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**36.5**	**J B**	49.9	15.0	mg/Kg		12/14/22 15:35	12/17/22 22:10	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		12/14/22 15:35	12/17/22 22:10	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		12/14/22 15:35	12/17/22 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*12/14/22 15:35*	*12/17/22 22:10*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*12/14/22 15:35*	*12/17/22 22:10*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.83**	**J**	5.05	0.399	mg/Kg			12/20/22 17:47	1

Surrogate Summary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3634-1	S-1	60 S1-	82
890-3634-1 MS	S-1	106	83
890-3634-1 MSD	S-1	111	89
890-3634-2	S-1	72	95
890-3634-3	S-1	65 S1-	59 S1-
890-3634-4	S-1	116	99
890-3634-5	S-1	129	69 S1-
890-3634-6	S-2	131 S1+	112
890-3634-7	S-2	131 S1+	79
890-3634-8	S-2	118	93
890-3634-9	S-2	136 S1+	97
890-3634-10	S-2	130	94
890-3634-11	S-3	128	88
890-3634-12	S-3	133 S1+	90
890-3634-13	S-3	144 S1+	91
890-3634-14	S-3	146 S1+	89
890-3634-15	S-3	134 S1+	92
LCS 880-42493/1-A	Lab Control Sample	117	87
LCSD 880-42493/2-A	Lab Control Sample Dup	115	85
MB 880-42493/5-A	Method Blank	105	79
MB 880-42512/5-A	Method Blank	106	76

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3634-1	S-1	107	98
890-3634-2	S-1	110	98
890-3634-3	S-1	92	85
890-3634-4	S-1	95	87
890-3634-5	S-1	110	99
890-3634-6	S-2	102	93
890-3634-7	S-2	103	94
890-3634-8	S-2	89	83
890-3634-9	S-2	94	87
890-3634-10	S-2	106	95
890-3634-11	S-3	90	82
890-3634-12	S-3	100	89
890-3634-13	S-3	106	120
890-3634-14	S-3	117	131 S1+
890-3634-15	S-3	125	139 S1+
LCS 880-41843/2-A	Lab Control Sample	127	139 S1+
LCS 880-42002/2-A	Lab Control Sample	82	91
LCSD 880-41843/3-A	Lab Control Sample Dup	124	132 S1+

Surrogate Summary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
LCSD 880-42002/3-A	Lab Control Sample Dup	108	99								
MB 880-41843/1-A	Method Blank	134 S1+	154 S1+								
MB 880-42002/1-A	Method Blank	139 S1+	131 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-42493/5-A
Matrix: Solid
Analysis Batch: 42587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42493

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		12/22/22 10:51	12/25/22 09:21	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		12/22/22 10:51	12/25/22 09:21	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		12/22/22 10:51	12/25/22 09:21	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		12/22/22 10:51	12/25/22 09:21	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		12/22/22 10:51	12/25/22 09:21	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		12/22/22 10:51	12/25/22 09:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/22/22 10:51*	*12/25/22 09:21*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*12/22/22 10:51*	*12/25/22 09:21*	*1*

Lab Sample ID: LCS 880-42493/1-A
Matrix: Solid
Analysis Batch: 42587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09767		mg/Kg		98	70 - 130
Toluene	0.100	0.09865		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.09820		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2153		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1079		mg/Kg		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: LCSD 880-42493/2-A
Matrix: Solid
Analysis Batch: 42587

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42493

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09185		mg/Kg		92	70 - 130	6	35
Toluene	0.100	0.09474		mg/Kg		95	70 - 130	4	35
Ethylbenzene	0.100	0.09381		mg/Kg		94	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2052		mg/Kg		103	70 - 130	5	35
o-Xylene	0.100	0.1048		mg/Kg		105	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: 890-3634-1 MS
Matrix: Solid
Analysis Batch: 42587

Client Sample ID: S-1
Prep Type: Total/NA
Prep Batch: 42493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000387	U F1	0.0990	0.05992	F1	mg/Kg		61	70 - 130
Toluene	<0.000458	U F1	0.0990	0.05173	F1	mg/Kg		52	70 - 130

QC Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3634-1 MS
Matrix: Solid
Analysis Batch: 42587

Client Sample ID: S-1
Prep Type: Total/NA
Prep Batch: 42493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.000567	U F1	0.0990	0.04498	F1	mg/Kg		45	70 - 130
m-Xylene & p-Xylene	0.00102	J F1	0.198	0.09908	F1	mg/Kg		50	70 - 130
o-Xylene	<0.000345	U F1	0.0990	0.04625	F1	mg/Kg		47	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*

Lab Sample ID: 890-3634-1 MSD
Matrix: Solid
Analysis Batch: 42587

Client Sample ID: S-1
Prep Type: Total/NA
Prep Batch: 42493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000387	U F1	0.0996	0.05151	F1	mg/Kg		52	70 - 130	15	35
Toluene	<0.000458	U F1	0.0996	0.04673	F1	mg/Kg		47	70 - 130	10	35
Ethylbenzene	<0.000567	U F1	0.0996	0.04118	F1	mg/Kg		41	70 - 130	9	35
m-Xylene & p-Xylene	0.00102	J F1	0.199	0.08922	F1	mg/Kg		44	70 - 130	10	35
o-Xylene	<0.000345	U F1	0.0996	0.04444	F1	mg/Kg		45	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: MB 880-42512/5-A
Matrix: Solid
Analysis Batch: 42587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		12/22/22 11:30	12/24/22 22:43	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		12/22/22 11:30	12/24/22 22:43	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		12/22/22 11:30	12/24/22 22:43	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		12/22/22 11:30	12/24/22 22:43	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		12/22/22 11:30	12/24/22 22:43	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		12/22/22 11:30	12/24/22 22:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*12/22/22 11:30*	*12/24/22 22:43*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*12/22/22 11:30*	*12/24/22 22:43*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-41843/1-A
Matrix: Solid
Analysis Batch: 42078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41843

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.06	J	50.0	15.0	mg/Kg		12/14/22 15:35	12/17/22 08:52	1

QC Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-41843/1-A
Matrix: Solid
Analysis Batch: 42078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41843

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/14/22 15:35	12/17/22 08:52	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/14/22 15:35	12/17/22 08:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*134*	*S1+*	*70 - 130*	*12/14/22 15:35*	*12/17/22 08:52*	*1*
o-Terphenyl	*154*	*S1+*	*70 - 130*	*12/14/22 15:35*	*12/17/22 08:52*	*1*

Lab Sample ID: LCS 880-41843/2-A
Matrix: Solid
Analysis Batch: 42078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41843

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1168		mg/Kg		117	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1193		mg/Kg		119	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*127*		*70 - 130*
o-Terphenyl	*139*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-41843/3-A
Matrix: Solid
Analysis Batch: 42078

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41843

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1010		mg/Kg		101	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	1000	1154		mg/Kg		115	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*124*		*70 - 130*
o-Terphenyl	*132*	*S1+*	*70 - 130*

Lab Sample ID: MB 880-42002/1-A
Matrix: Solid
Analysis Batch: 42108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	23.51	J	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 09:55	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 09:55	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		12/16/22 09:37	12/18/22 09:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*12/16/22 09:37*	*12/18/22 09:55*	*1*

Eurofins Carlsbad

QC Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-42002/1-A
Matrix: Solid
Analysis Batch: 42108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42002

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	131	S1+	70 - 130	12/16/22 09:37	12/18/22 09:55	1

Lab Sample ID: LCS 880-42002/2-A
Matrix: Solid
Analysis Batch: 42108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	843.1		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	745.4		mg/Kg		75	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: LCSD 880-42002/3-A
Matrix: Solid
Analysis Batch: 42108

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42002

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	871.7		mg/Kg		87	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	818.2		mg/Kg		82	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	99		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41927/1-A
Matrix: Solid
Analysis Batch: 42177

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			12/20/22 15:33	1

Lab Sample ID: LCS 880-41927/2-A
Matrix: Solid
Analysis Batch: 42177

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	230.8		mg/Kg		92	90 - 110

QC Sample Results

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-41927/3-A
Matrix: Solid
Analysis Batch: 42177

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	231.1		mg/Kg		92	90 - 110	0	20

Lab Sample ID: 890-3634-6 MS
Matrix: Solid
Analysis Batch: 42177

Client Sample ID: S-2
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	13.8	F1	252	238.0	F1	mg/Kg		89	90 - 110		

Lab Sample ID: 890-3634-6 MSD
Matrix: Solid
Analysis Batch: 42177

Client Sample ID: S-2
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	13.8	F1	252	238.7	F1	mg/Kg		89	90 - 110	0	20

QC Association Summary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

GC VOA

Prep Batch: 42493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-1	S-1	Total/NA	Solid	5035	
890-3634-2	S-1	Total/NA	Solid	5035	
890-3634-3	S-1	Total/NA	Solid	5035	
890-3634-4	S-1	Total/NA	Solid	5035	
890-3634-5	S-1	Total/NA	Solid	5035	
890-3634-6	S-2	Total/NA	Solid	5035	
890-3634-7	S-2	Total/NA	Solid	5035	
890-3634-8	S-2	Total/NA	Solid	5035	
890-3634-9	S-2	Total/NA	Solid	5035	
890-3634-10	S-2	Total/NA	Solid	5035	
890-3634-11	S-3	Total/NA	Solid	5035	
890-3634-12	S-3	Total/NA	Solid	5035	
890-3634-13	S-3	Total/NA	Solid	5035	
890-3634-14	S-3	Total/NA	Solid	5035	
890-3634-15	S-3	Total/NA	Solid	5035	
MB 880-42493/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-42493/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-42493/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3634-1 MS	S-1	Total/NA	Solid	5035	
890-3634-1 MSD	S-1	Total/NA	Solid	5035	

Prep Batch: 42512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-42512/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 42587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-1	S-1	Total/NA	Solid	8021B	42493
890-3634-2	S-1	Total/NA	Solid	8021B	42493
890-3634-3	S-1	Total/NA	Solid	8021B	42493
890-3634-4	S-1	Total/NA	Solid	8021B	42493
890-3634-5	S-1	Total/NA	Solid	8021B	42493
890-3634-6	S-2	Total/NA	Solid	8021B	42493
890-3634-7	S-2	Total/NA	Solid	8021B	42493
890-3634-8	S-2	Total/NA	Solid	8021B	42493
890-3634-9	S-2	Total/NA	Solid	8021B	42493
890-3634-10	S-2	Total/NA	Solid	8021B	42493
890-3634-11	S-3	Total/NA	Solid	8021B	42493
890-3634-12	S-3	Total/NA	Solid	8021B	42493
890-3634-13	S-3	Total/NA	Solid	8021B	42493
890-3634-14	S-3	Total/NA	Solid	8021B	42493
890-3634-15	S-3	Total/NA	Solid	8021B	42493
MB 880-42493/5-A	Method Blank	Total/NA	Solid	8021B	42493
MB 880-42512/5-A	Method Blank	Total/NA	Solid	8021B	42512
LCS 880-42493/1-A	Lab Control Sample	Total/NA	Solid	8021B	42493
LCSD 880-42493/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	42493
890-3634-1 MS	S-1	Total/NA	Solid	8021B	42493
890-3634-1 MSD	S-1	Total/NA	Solid	8021B	42493

QC Association Summary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

GC VOA

Analysis Batch: 42601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-1	S-1	Total/NA	Solid	Total BTEX	
890-3634-2	S-1	Total/NA	Solid	Total BTEX	
890-3634-3	S-1	Total/NA	Solid	Total BTEX	
890-3634-4	S-1	Total/NA	Solid	Total BTEX	
890-3634-5	S-1	Total/NA	Solid	Total BTEX	
890-3634-6	S-2	Total/NA	Solid	Total BTEX	
890-3634-7	S-2	Total/NA	Solid	Total BTEX	
890-3634-8	S-2	Total/NA	Solid	Total BTEX	
890-3634-9	S-2	Total/NA	Solid	Total BTEX	
890-3634-10	S-2	Total/NA	Solid	Total BTEX	
890-3634-11	S-3	Total/NA	Solid	Total BTEX	
890-3634-12	S-3	Total/NA	Solid	Total BTEX	
890-3634-13	S-3	Total/NA	Solid	Total BTEX	
890-3634-14	S-3	Total/NA	Solid	Total BTEX	
890-3634-15	S-3	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 41843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-13	S-3	Total/NA	Solid	8015NM Prep	
890-3634-14	S-3	Total/NA	Solid	8015NM Prep	
890-3634-15	S-3	Total/NA	Solid	8015NM Prep	
MB 880-41843/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41843/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41843/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 42002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-1	S-1	Total/NA	Solid	8015NM Prep	
890-3634-2	S-1	Total/NA	Solid	8015NM Prep	
890-3634-3	S-1	Total/NA	Solid	8015NM Prep	
890-3634-4	S-1	Total/NA	Solid	8015NM Prep	
890-3634-5	S-1	Total/NA	Solid	8015NM Prep	
890-3634-6	S-2	Total/NA	Solid	8015NM Prep	
890-3634-7	S-2	Total/NA	Solid	8015NM Prep	
890-3634-8	S-2	Total/NA	Solid	8015NM Prep	
890-3634-9	S-2	Total/NA	Solid	8015NM Prep	
890-3634-10	S-2	Total/NA	Solid	8015NM Prep	
890-3634-11	S-3	Total/NA	Solid	8015NM Prep	
890-3634-12	S-3	Total/NA	Solid	8015NM Prep	
MB 880-42002/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-42002/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-42002/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 42078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-13	S-3	Total/NA	Solid	8015B NM	41843
890-3634-14	S-3	Total/NA	Solid	8015B NM	41843
890-3634-15	S-3	Total/NA	Solid	8015B NM	41843
MB 880-41843/1-A	Method Blank	Total/NA	Solid	8015B NM	41843

QC Association Summary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

GC Semi VOA (Continued)

Analysis Batch: 42078 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-41843/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41843
LCSD 880-41843/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41843

Analysis Batch: 42108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-1	S-1	Total/NA	Solid	8015B NM	42002
890-3634-2	S-1	Total/NA	Solid	8015B NM	42002
890-3634-3	S-1	Total/NA	Solid	8015B NM	42002
890-3634-4	S-1	Total/NA	Solid	8015B NM	42002
890-3634-5	S-1	Total/NA	Solid	8015B NM	42002
890-3634-6	S-2	Total/NA	Solid	8015B NM	42002
890-3634-7	S-2	Total/NA	Solid	8015B NM	42002
890-3634-8	S-2	Total/NA	Solid	8015B NM	42002
890-3634-9	S-2	Total/NA	Solid	8015B NM	42002
890-3634-10	S-2	Total/NA	Solid	8015B NM	42002
890-3634-11	S-3	Total/NA	Solid	8015B NM	42002
890-3634-12	S-3	Total/NA	Solid	8015B NM	42002
MB 880-42002/1-A	Method Blank	Total/NA	Solid	8015B NM	42002
LCS 880-42002/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	42002
LCSD 880-42002/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	42002

Analysis Batch: 42207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-1	S-1	Total/NA	Solid	8015 NM	
890-3634-2	S-1	Total/NA	Solid	8015 NM	
890-3634-3	S-1	Total/NA	Solid	8015 NM	
890-3634-4	S-1	Total/NA	Solid	8015 NM	
890-3634-5	S-1	Total/NA	Solid	8015 NM	
890-3634-6	S-2	Total/NA	Solid	8015 NM	
890-3634-7	S-2	Total/NA	Solid	8015 NM	
890-3634-8	S-2	Total/NA	Solid	8015 NM	
890-3634-9	S-2	Total/NA	Solid	8015 NM	
890-3634-10	S-2	Total/NA	Solid	8015 NM	
890-3634-11	S-3	Total/NA	Solid	8015 NM	
890-3634-12	S-3	Total/NA	Solid	8015 NM	
890-3634-13	S-3	Total/NA	Solid	8015 NM	
890-3634-14	S-3	Total/NA	Solid	8015 NM	
890-3634-15	S-3	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 41927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-1	S-1	Soluble	Solid	DI Leach	
890-3634-2	S-1	Soluble	Solid	DI Leach	
890-3634-3	S-1	Soluble	Solid	DI Leach	
890-3634-4	S-1	Soluble	Solid	DI Leach	
890-3634-5	S-1	Soluble	Solid	DI Leach	
890-3634-6	S-2	Soluble	Solid	DI Leach	
890-3634-7	S-2	Soluble	Solid	DI Leach	
890-3634-8	S-2	Soluble	Solid	DI Leach	

QC Association Summary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

HPLC/IC (Continued)

Leach Batch: 41927 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-9	S-2	Soluble	Solid	DI Leach	
890-3634-10	S-2	Soluble	Solid	DI Leach	
890-3634-11	S-3	Soluble	Solid	DI Leach	
890-3634-12	S-3	Soluble	Solid	DI Leach	
890-3634-13	S-3	Soluble	Solid	DI Leach	
890-3634-14	S-3	Soluble	Solid	DI Leach	
890-3634-15	S-3	Soluble	Solid	DI Leach	
MB 880-41927/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41927/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41927/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3634-6 MS	S-2	Soluble	Solid	DI Leach	
890-3634-6 MSD	S-2	Soluble	Solid	DI Leach	

Analysis Batch: 42177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3634-1	S-1	Soluble	Solid	300.0	41927
890-3634-2	S-1	Soluble	Solid	300.0	41927
890-3634-3	S-1	Soluble	Solid	300.0	41927
890-3634-4	S-1	Soluble	Solid	300.0	41927
890-3634-5	S-1	Soluble	Solid	300.0	41927
890-3634-6	S-2	Soluble	Solid	300.0	41927
890-3634-7	S-2	Soluble	Solid	300.0	41927
890-3634-8	S-2	Soluble	Solid	300.0	41927
890-3634-9	S-2	Soluble	Solid	300.0	41927
890-3634-10	S-2	Soluble	Solid	300.0	41927
890-3634-11	S-3	Soluble	Solid	300.0	41927
890-3634-12	S-3	Soluble	Solid	300.0	41927
890-3634-13	S-3	Soluble	Solid	300.0	41927
890-3634-14	S-3	Soluble	Solid	300.0	41927
890-3634-15	S-3	Soluble	Solid	300.0	41927
MB 880-41927/1-A	Method Blank	Soluble	Solid	300.0	41927
LCS 880-41927/2-A	Lab Control Sample	Soluble	Solid	300.0	41927
LCSD 880-41927/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41927
890-3634-6 MS	S-2	Soluble	Solid	300.0	41927
890-3634-6 MSD	S-2	Soluble	Solid	300.0	41927

Lab Chronicle

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-1
Date Collected: 12/13/22 09:22
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 09:43	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 14:17	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 16:27	CH	EET MID

Client Sample ID: S-1
Date Collected: 12/13/22 09:26
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 10:03	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 14:39	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 16:31	CH	EET MID

Client Sample ID: S-1
Date Collected: 12/13/22 09:27
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 10:24	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 15:01	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 16:35	CH	EET MID

Client Sample ID: S-1
Date Collected: 12/13/22 09:31
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 10:44	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID

Lab Chronicle

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-1
Date Collected: 12/13/22 09:31
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 15:23	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 16:40	CH	EET MID

Client Sample ID: S-1
Date Collected: 12/13/22 09:32
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 11:05	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 15:45	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 16:44	CH	EET MID

Client Sample ID: S-2
Date Collected: 12/13/22 09:41
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 11:26	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 16:07	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 16:49	CH	EET MID

Client Sample ID: S-2
Date Collected: 12/13/22 09:45
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 11:46	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 16:28	SM	EET MID

Lab Chronicle

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-2
Date Collected: 12/13/22 09:45
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 17:02	CH	EET MID

Client Sample ID: S-2
Date Collected: 12/13/22 09:50
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 12:07	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 17:11	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 17:07	CH	EET MID

Client Sample ID: S-2
Date Collected: 12/13/22 09:52
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 12:27	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 17:33	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 17:20	CH	EET MID

Client Sample ID: S-2
Date Collected: 12/13/22 09:55
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 12:48	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 17:55	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 17:24	CH	EET MID

Lab Chronicle

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-3
Date Collected: 12/13/22 10:08
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 14:11	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 18:17	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 17:29	CH	EET MID

Client Sample ID: S-3
Date Collected: 12/13/22 10:11
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 14:31	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	42002	12/16/22 09:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42108	12/18/22 18:39	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 17:33	CH	EET MID

Client Sample ID: S-3
Date Collected: 12/13/22 10:14
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 14:52	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41843	12/14/22 15:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42078	12/17/22 21:28	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 17:38	CH	EET MID

Client Sample ID: S-3
Date Collected: 12/13/22 10:17
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 15:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Client Sample ID: S-3
Date Collected: 12/13/22 10:17
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41843	12/14/22 15:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42078	12/17/22 21:49	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 17:42	CH	EET MID

Client Sample ID: S-3
Date Collected: 12/13/22 10:30
Date Received: 12/13/22 11:22

Lab Sample ID: 890-3634-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	42493	12/22/22 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42587	12/25/22 15:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			42601	12/26/22 15:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42207	12/19/22 15:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	41843	12/14/22 15:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42078	12/17/22 22:10	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	41927	12/15/22 14:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42177	12/20/22 17:47	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Talon/LPE
Project/Site: ARCO 5 FED #01

Job ID: 890-3634-1
SDG: Rual County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3634-1	S-1	Solid	12/13/22 09:22	12/13/22 11:22	SURFACE
890-3634-2	S-1	Solid	12/13/22 09:26	12/13/22 11:22	1
890-3634-3	S-1	Solid	12/13/22 09:27	12/13/22 11:22	2
890-3634-4	S-1	Solid	12/13/22 09:31	12/13/22 11:22	3
890-3634-5	S-1	Solid	12/13/22 09:32	12/13/22 11:22	4
890-3634-6	S-2	Solid	12/13/22 09:41	12/13/22 11:22	SURFACE
890-3634-7	S-2	Solid	12/13/22 09:45	12/13/22 11:22	1
890-3634-8	S-2	Solid	12/13/22 09:50	12/13/22 11:22	2
890-3634-9	S-2	Solid	12/13/22 09:52	12/13/22 11:22	3
890-3634-10	S-2	Solid	12/13/22 09:55	12/13/22 11:22	4
890-3634-11	S-3	Solid	12/13/22 10:08	12/13/22 11:22	SURFACE
890-3634-12	S-3	Solid	12/13/22 10:11	12/13/22 11:22	1
890-3634-13	S-3	Solid	12/13/22 10:14	12/13/22 11:22	2
890-3634-14	S-3	Solid	12/13/22 10:17	12/13/22 11:22	3
890-3634-15	S-3	Solid	12/13/22 10:30	12/13/22 11:22	4

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Chad Hensley	Bill to: (if different)	
Company Name:	Talon LPE	Company Name:	
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575.746.8768	Email:	Chensley@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Arco 5 Fed #01	Turn Around	☑ Routine ☐ Rush
Project Number:	702520.040.01	Due Date:	
Project Location:	Rual County, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Chad Hensley		
PO #:	N/A		

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.2
Total Containers:		Corrected Temperature:	2.0

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CL	BTEX	TPH	Sample Comments
S-1	Soil	12/13/2022	09:22	5	Grab/	1		x	X	X	
S-1	Soil	12/13/2022	09:26	1'	Grab/	1		x	X	X	
S-1	Soil	12/13/2022	09:27	2'	Grab/	1		x	X	X	
S-1	Soil	12/13/2022	09:31	3'	Grab/	1		x	X	X	
S-1	Soil	12/13/2022	09:32	4'	Grab/	1		x	X	X	
S-2	Soil	12/13/2022	09:41	8	Grab/	1		x	X	X	
S-2	Soil	12/13/2022	09:45	1'	Grab/	1		x	X	X	
~~S-2~~	~~Soil~~	~~12/13/2022~~	~~09:50~~	2'	Grab/	1		x	X	X	
S-2	Soil	12/13/2022	09:52	3'	Grab/	1		x	x	x	
S-2	Soil	12/13/2022	09:55	4	Grab/	1		x	x	x	

890-3634 Chain of Custody

ANALYSIS REQUEST — Parameters

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12-13-22 1122	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

eurofins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Chad Hensley	Bill to: (if different)	
Company Name:	Talon LPE	Company Name:	
Address:	408 W. Texas Ave.	Address:	
City, State ZIP:	Artesia, NM 88210	City, State ZIP:	
Phone:	575.746.8768	Email:	Chensley@talonlpe.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Arco 5 Fed #01	Turn Around	
Project Number:	702520.040.01	☑ Routine ☐ Rush	
Project Location:	Rual County, NM	Due Date:	
Sampler's Name:	Chad Hensley	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	N/A		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2SO_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CL	BTEX	TPH	Sample Comments
S-3	Soil	12/13/2022	10:08	S	Grab/	1		x	X	X	
S-3	Soil	12/13/2022	10:11	1'	Grab/	1		x	X	X	
S-3	Soil	12/13/2022	10:14	2'	Grab/	1		x	X	X	
S-3	Soil	12/13/2022	10:17	3'	Grab/	1		x	X	X	
S-3	Soil	12/13/2022	10:31	4'	Grab/	1		x	X	X	
	Soil	12/13/2022			Grab/	1		x	X	X	
	Soil	12/13/2022			Grab/	1		x	X	X	
	Soil	12/13/2022			Grab/	1		x	X	X	
	Soil	12/13/2022			Grab/	1		x	X	X	
	Soil	12/13/2022			Grab/	1		x	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12-13-22	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3634-1
SDG Number: Rual County NM

Login Number: 3634
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Talon/LPE

Job Number: 890-3634-1
SDG Number: Rual County NM

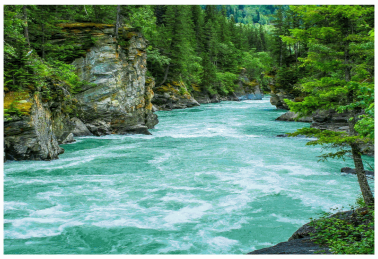
Login Number: 3634
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 12/14/22 12:10 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Report to:

Chad Hensley



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
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Practical Solutions for a Better Tomorrow

Analytical Report

Talon LPE

Project Name:	Arco 5
Work Order:	E312173
Job Number:	23052-0001
Received:	12/27/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
1/2/24

Date Reported: 1/2/24

Chad Hensley
408 W Texas Ave
Artesia, NM 88210

Project Name: Arco 5
Workorder: E312173
Date Received: 12/27/2023 8:00:00AM

Chad Hensley,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/27/2023 8:00:00AM, under the Project Name: Arco 5.

The analytical test results summarized in this report with the Project Name: Arco 5 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

Raina Schwanz
Laboratory Administrator
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Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Talon LPE	Project Name:	Arco 5	**Reported:**
408 W Texas Ave	Project Number:	23052-0001	
Artesia NM, 88210	Project Manager:	Chad Hensley	01/02/24 11:47

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
C-1 2.1'	E312173-01A	Soil	12/21/23	12/27/23	Glass Jar, 2 oz.
SW-1	E312173-02A	Soil	12/21/23	12/27/23	Glass Jar, 2 oz.
SW-2	E312173-03A	Soil	12/21/23	12/27/23	Glass Jar, 2 oz.
SW-3	E312173-04A	Soil	12/21/23	12/27/23	Glass Jar, 2 oz.
SW-4	E312173-05A	Soil	12/21/23	12/27/23	Glass Jar, 2 oz.

Sample Data

Talon LPE	Project Name:	Arco 5	
408 W Texas Ave	Project Number:	23052-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Chad Hensley	1/2/2024 11:47:44AM

C-1 2.1'

E312173-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Benzene	ND	0.0250	1	12/27/23	12/28/23	
Ethylbenzene	ND	0.0250	1	12/27/23	12/28/23	
Toluene	ND	0.0250	1	12/27/23	12/28/23	
o-Xylene	ND	0.0250	1	12/27/23	12/28/23	
p,m-Xylene	ND	0.0500	1	12/27/23	12/28/23	
Total Xylenes	ND	0.0250	1	12/27/23	12/28/23	
Surrogate: 4-Bromochlorobenzene-PID		*91.5 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/27/23	12/28/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.8 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2352021
Diesel Range Organics (C10-C28)	ND	25.0	1	12/28/23	12/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/28/23	12/28/23	
Surrogate: n-Nonane		*96.1 %*	*50-200*	*12/28/23*	*12/28/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2352024
Chloride	ND	20.0	1	12/28/23	12/28/23	

Sample Data

Talon LPE	Project Name:	Arco 5	
408 W Texas Ave	Project Number:	23052-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Chad Hensley	1/2/2024 11:47:44AM

SW-1

E312173-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Benzene	ND	0.0250	1	12/27/23	12/28/23	
Ethylbenzene	ND	0.0250	1	12/27/23	12/28/23	
Toluene	ND	0.0250	1	12/27/23	12/28/23	
o-Xylene	ND	0.0250	1	12/27/23	12/28/23	
p,m-Xylene	ND	0.0500	1	12/27/23	12/28/23	
Total Xylenes	ND	0.0250	1	12/27/23	12/28/23	
Surrogate: 4-Bromochlorobenzene-PID		*92.8 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/27/23	12/28/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.8 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2352021
Diesel Range Organics (C10-C28)	ND	25.0	1	12/28/23	12/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/28/23	12/28/23	
Surrogate: n-Nonane		*92.6 %*	*50-200*	*12/28/23*	*12/28/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2352024
Chloride	ND	20.0	1	12/28/23	12/29/23	

Sample Data

Talon LPE	Project Name:	Arco 5	
408 W Texas Ave	Project Number:	23052-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Chad Hensley	1/2/2024 11:47:44AM

SW-2

E312173-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Benzene	ND	0.0250	1	12/27/23	12/28/23	
Ethylbenzene	ND	0.0250	1	12/27/23	12/28/23	
Toluene	ND	0.0250	1	12/27/23	12/28/23	
o-Xylene	ND	0.0250	1	12/27/23	12/28/23	
p,m-Xylene	ND	0.0500	1	12/27/23	12/28/23	
Total Xylenes	ND	0.0250	1	12/27/23	12/28/23	
Surrogate: 4-Bromochlorobenzene-PID		*92.5 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/27/23	12/28/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.2 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2352021
Diesel Range Organics (C10-C28)	ND	25.0	1	12/28/23	12/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/28/23	12/28/23	
Surrogate: n-Nonane		*100 %*	*50-200*	*12/28/23*	*12/28/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2352024
Chloride	ND	20.0	1	12/28/23	12/28/23	

Sample Data

Talon LPE	Project Name:	Arco 5	
408 W Texas Ave	Project Number:	23052-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Chad Hensley	1/2/2024 11:47:44AM

SW-3

E312173-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Benzene	ND	0.0250	1	12/27/23	12/28/23	
Ethylbenzene	ND	0.0250	1	12/27/23	12/28/23	
Toluene	ND	0.0250	1	12/27/23	12/28/23	
o-Xylene	ND	0.0250	1	12/27/23	12/28/23	
p,m-Xylene	ND	0.0500	1	12/27/23	12/28/23	
Total Xylenes	ND	0.0250	1	12/27/23	12/28/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/27/23	12/28/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.3 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2352021
Diesel Range Organics (C10-C28)	ND	25.0	1	12/28/23	12/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/28/23	12/28/23	
Surrogate: n-Nonane		*101 %*	*50-200*	*12/28/23*	*12/28/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2352024
Chloride	ND	20.0	1	12/28/23	12/28/23	

Sample Data

Talon LPE	Project Name:	Arco 5	
408 W Texas Ave	Project Number:	23052-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Chad Hensley	1/2/2024 11:47:44AM

SW-4

E312173-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Benzene	ND	0.0250	1	12/27/23	12/28/23	
Ethylbenzene	ND	0.0250	1	12/27/23	12/28/23	
Toluene	ND	0.0250	1	12/27/23	12/28/23	
o-Xylene	ND	0.0250	1	12/27/23	12/28/23	
p,m-Xylene	ND	0.0500	1	12/27/23	12/28/23	
Total Xylenes	ND	0.0250	1	12/27/23	12/28/23	
Surrogate: 4-Bromochlorobenzene-PID		*93.7 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2352008
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/27/23	12/28/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.4 %*	*70-130*	*12/27/23*	*12/28/23*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2352021
Diesel Range Organics (C10-C28)	ND	25.0	1	12/28/23	12/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	12/28/23	12/28/23	
Surrogate: n-Nonane		*102 %*	*50-200*	*12/28/23*	*12/28/23*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2352024
Chloride	ND	20.0	1	12/28/23	12/28/23	

QC Summary Data

Talon LPE	Project Name:	Arco 5	**Reported:**
408 W Texas Ave	Project Number:	23052-0001	
Artesia NM, 88210	Project Manager:	Chad Hensley	1/2/2024 11:47:44AM

Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2352008-BLK1)									Prepared: 12/27/23 Analyzed: 12/28/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	*7.32*		*8.00*		*91.6*	*70-130*			
LCS (2352008-BS1)									Prepared: 12/27/23 Analyzed: 12/28/23
Benzene	4.77	0.0250	5.00		95.4	70-130			
Ethylbenzene	4.98	0.0250	5.00		99.6	70-130			
Toluene	4.97	0.0250	5.00		99.4	70-130			
o-Xylene	4.99	0.0250	5.00		99.8	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.1	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.29*		*8.00*		*91.1*	*70-130*			
Matrix Spike (2352008-MS1)				**Source: E312171-21**					Prepared: 12/27/23 Analyzed: 12/28/23
Benzene	4.59	0.0250	5.00	ND	91.8	54-133			
Ethylbenzene	4.79	0.0250	5.00	ND	95.8	61-133			
Toluene	4.77	0.0250	5.00	ND	95.5	61-130			
o-Xylene	4.80	0.0250	5.00	ND	96.0	63-131			
p,m-Xylene	9.75	0.0500	10.0	ND	97.5	63-131			
Total Xylenes	14.5	0.0250	15.0	ND	97.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.34*		*8.00*		*91.8*	*70-130*			
Matrix Spike Dup (2352008-MSD1)				**Source: E312171-21**					Prepared: 12/27/23 Analyzed: 12/28/23
Benzene	4.51	0.0250	5.00	ND	90.2	54-133	1.73	20	
Ethylbenzene	4.72	0.0250	5.00	ND	94.5	61-133	1.37	20	
Toluene	4.71	0.0250	5.00	ND	94.1	61-130	1.42	20	
o-Xylene	4.77	0.0250	5.00	ND	95.4	63-131	0.661	20	
p,m-Xylene	9.64	0.0500	10.0	ND	96.4	63-131	1.17	20	
Total Xylenes	14.4	0.0250	15.0	ND	96.0	63-131	1.00	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.29*		*8.00*		*91.2*	*70-130*			

QC Summary Data

Talon LPE	Project Name:	Arco 5	**Reported:**
408 W Texas Ave	Project Number:	23052-0001	
Artesia NM, 88210	Project Manager:	Chad Hensley	1/2/2024 11:47:44AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2352008-BLK1)									Prepared: 12/27/23 Analyzed: 12/28/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.50*		*8.00*		*93.8*	*70-130*			
LCS (2352008-BS2)									Prepared: 12/27/23 Analyzed: 12/28/23
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0		92.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.66*		*8.00*		*95.7*	*70-130*			
Matrix Spike (2352008-MS2)				**Source: E312171-21**					Prepared: 12/27/23 Analyzed: 12/28/23
Gasoline Range Organics (C6-C10)	49.6	20.0	50.0	ND	99.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.61*		*8.00*		*95.2*	*70-130*			
Matrix Spike Dup (2352008-MSD2)				**Source: E312171-21**					Prepared: 12/27/23 Analyzed: 12/28/23
Gasoline Range Organics (C6-C10)	49.8	20.0	50.0	ND	99.5	70-130	0.268	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.61*		*8.00*		*95.1*	*70-130*			

QC Summary Data

Talon LPE	Project Name:	Arco 5	**Reported:**
408 W Texas Ave	Project Number:	23052-0001	
Artesia NM, 88210	Project Manager:	Chad Hensley	1/2/2024 11:47:44AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2352021-BLK1)									Prepared: 12/28/23 Analyzed: 12/28/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*50.4*		*50.0*		*101*	*50-200*			
LCS (2352021-BS1)									Prepared: 12/28/23 Analyzed: 12/28/23
Diesel Range Organics (C10-C28)	255	25.0	250		102	38-132			
Surrogate: n-Nonane	*50.7*		*50.0*		*101*	*50-200*			
Matrix Spike (2352021-MS1)				**Source: E312173-05**					Prepared: 12/28/23 Analyzed: 12/28/23
Diesel Range Organics (C10-C28)	257	25.0	250	ND	103	38-132			
Surrogate: n-Nonane	*51.9*		*50.0*		*104*	*50-200*			
Matrix Spike Dup (2352021-MSD1)				**Source: E312173-05**					Prepared: 12/28/23 Analyzed: 12/28/23
Diesel Range Organics (C10-C28)	259	25.0	250	ND	104	38-132	0.592	20	
Surrogate: n-Nonane	*52.7*		*50.0*		*105*	*50-200*			

QC Summary Data

Talon LPE	Project Name:	Arco 5	**Reported:**
408 W Texas Ave	Project Number:	23052-0001	
Artesia NM, 88210	Project Manager:	Chad Hensley	1/2/2024 11:47:44AM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2352024-BLK1)									Prepared: 12/28/23 Analyzed: 12/29/23
Chloride	ND	20.0							
LCS (2352024-BS1)									Prepared: 12/28/23 Analyzed: 12/29/23
Chloride	246	20.0	250		98.6	90-110			
Matrix Spike (2352024-MS1)				**Source: E312173-02**					Prepared: 12/28/23 Analyzed: 12/29/23
Chloride	269	20.0	250	ND	108	80-120			
Matrix Spike Dup (2352024-MSD1)				**Source: E312173-02**					Prepared: 12/28/23 Analyzed: 12/29/23
Chloride	253	20.0	250	ND	101	80-120	6.04	20	

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

Definitions and Notes

Talon LPE	Project Name:	Arco 5	
408 W Texas Ave	Project Number:	23052-0001	**Reported:**
Artesia NM, 88210	Project Manager:	Chad Hensley	01/02/24 11:47

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite
DNR	Did not react with the addition of acid or base.

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

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

Client: Talon LPE
Project: Arco 5
Project Manager: C. Hensley
Address: 408 W. Texas Ave
City, State, Zip Artesia, NM 88210
Phone: 575-746-8768
Email: chensley@talonlpe.com
Report due by:

Bill To
Attention: Matador
Address: Clint Taley
City, State, Zip
Phone:
Email:

Lab Use Only
Lab WO# E312173
Job Number 23052-0001

TAT: 1D | 2D | 3D | Standard (X)

EPA Program: CWA | SDWA | RCRA

State: NM (X) | CO | UT | AZ | TX

Analysis and Method

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	Remarks
0700	12/21/23	soil	1	C-1 2.1'	1	X	X			X			
0710				SW-1	2								
0717				SW-2	3								
0721				SW-3	4								
0745				SW-4	5								

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	12/21/23		Michelle Gaylor	12.22.23	1315
Michelle Gaylor Jr	12.22.23	1445		12.22.23	1800
	12.22.23	2400	DMontano	12/22/23	8:00

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

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other
Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

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

Envirotech Analytical Laboratory

Printed: 12/27/2023 11:28:56AM

Sample Receipt Checklist (SRC)

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

Client:	Talon LPE	Date Received:	12/27/23 08:00	Work Order ID:	E312173
Phone:	(575) 746-8768	Date Logged In:	12/27/23 08:44	Logged In By:	Jordan Montano
Email:	chensley@talonlpe.com	Due Date:	01/03/24 17:00 (4 day TAT)		

Chain of Custody (COC)

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

Comments/Resolution

Sample Turn Around Time (TAT)

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

Sample Cooler

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

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date

envirotech Inc.

CARDINAL Laboratories

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

September 08, 2023

CHAD HENSLEY

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ARCO 5 FED #1

Enclosed are the results of analyses for samples received by the laboratory on 07/28/23 14:00.

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

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

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

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

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

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

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ARCO 5 FED #1 Project Number: 702520.040.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Sep-23 09:21

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
C - 1 2'	H233998-01	Soil	28-Jul-23 07:12	28-Jul-23 14:00

09/08/23 - The client changed the sample ID (see COC). This is the revised report and will replace the one sent on 08/04/23.

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ARCO 5 FED #1 Project Number: 702520.040.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Sep-23 09:21

C - 1 2'

H233998-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**80.0**		16.0	mg/kg	4	3080427	AC	04-Aug-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	3080224	MS	04-Aug-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3080224	MS	04-Aug-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3080224	MS	04-Aug-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3080224	MS	04-Aug-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3080224	MS	04-Aug-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*104 %*	*71.5-134*		*3080224*	MS	*04-Aug-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3080214	MS	03-Aug-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3080214	MS	03-Aug-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3080214	MS	03-Aug-23	8015B	
Surrogate: 1-Chlorooctane			*105 %*	*48.2-134*		*3080214*	MS	*03-Aug-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*125 %*	*49.1-148*		*3080214*	MS	*03-Aug-23*	*8015B*	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ARCO 5 FED #1 Project Number: 702520.040.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Sep-23 09:21

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3080427 - 1:4 DI Water										
Blank (3080427-BLK1)				Prepared & Analyzed: 04-Aug-23						
Chloride	ND	16.0	mg/kg							
LCS (3080427-BS1)				Prepared & Analyzed: 04-Aug-23						
Chloride	448	16.0	mg/kg	400		112	80-120			
LCS Dup (3080427-BSD1)				Prepared & Analyzed: 04-Aug-23						
Chloride	432	16.0	mg/kg	400		108	80-120	3.64	20	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ARCO 5 FED #1 Project Number: 702520.040.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Sep-23 09:21

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3080224 - Volatiles										
Blank (3080224-BLK1)				Prepared: 02-Aug-23 Analyzed: 04-Aug-23						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0505*		mg/kg	*0.0500*		*101*	*71.5-134*			
LCS (3080224-BS1)				Prepared: 02-Aug-23 Analyzed: 04-Aug-23						
Benzene	2.03	0.050	mg/kg	2.00		101	82.8-130			
Toluene	1.97	0.050	mg/kg	2.00		98.3	86-128			
Ethylbenzene	2.00	0.050	mg/kg	2.00		100	85.9-128			
m,p-Xylene	4.00	0.100	mg/kg	4.00		100	89-129			
o-Xylene	1.97	0.050	mg/kg	2.00		98.5	86.1-125			
Total Xylenes	5.97	0.150	mg/kg	6.00		99.6	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0508*		mg/kg	*0.0500*		*102*	*71.5-134*			
LCS Dup (3080224-BSD1)				Prepared: 02-Aug-23 Analyzed: 04-Aug-23						
Benzene	2.09	0.050	mg/kg	2.00		105	82.8-130	3.20	15.8	
Toluene	2.00	0.050	mg/kg	2.00		99.9	86-128	1.65	15.9	
Ethylbenzene	2.06	0.050	mg/kg	2.00		103	85.9-128	3.00	16	
m,p-Xylene	4.18	0.100	mg/kg	4.00		104	89-129	4.27	16.2	
o-Xylene	1.99	0.050	mg/kg	2.00		99.5	86.1-125	0.964	16.7	
Total Xylenes	6.17	0.150	mg/kg	6.00		103	88.2-128	3.19	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0525*		mg/kg	*0.0500*		*105*	*71.5-134*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ARCO 5 FED #1 Project Number: 702520.040.01 Project Manager: CHAD HENSLEY Fax To: (575) 745-8905	Reported: 08-Sep-23 09:21

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3080214 - General Prep - Organics										
Blank (3080214-BLK1)				Prepared: 02-Aug-23 Analyzed: 03-Aug-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*45.7*		mg/kg	*50.0*		*91.4*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*54.8*		mg/kg	*50.0*		*110*	*49.1-148*			
LCS (3080214-BS1)				Prepared: 02-Aug-23 Analyzed: 03-Aug-23						
GRO C6-C10	161	10.0	mg/kg	200		80.3	66.4-123			
DRO >C10-C28	183	10.0	mg/kg	200		91.7	66.5-118			
Total TPH C6-C28	344	10.0	mg/kg	400		86.0	77.6-123			
Surrogate: 1-Chlorooctane	*46.1*		mg/kg	*50.0*		*92.3*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.2*		mg/kg	*50.0*		*104*	*49.1-148*			
LCS Dup (3080214-BSD1)				Prepared: 02-Aug-23 Analyzed: 03-Aug-23						
GRO C6-C10	170	10.0	mg/kg	200		85.1	66.4-123	5.77	17.7	
DRO >C10-C28	190	10.0	mg/kg	200		95.0	66.5-118	3.46	21	
Total TPH C6-C28	360	10.0	mg/kg	400		90.0	77.6-123	4.55	18.5	
Surrogate: 1-Chlorooctane	*43.8*		mg/kg	*50.0*		*87.7*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*49.4*		mg/kg	*50.0*		*98.8*	*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

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: C. Hensley		P.O. #:	
Address: 408 W. Texas Ave		Company:	
City: Artesia	State: NM Zip: 88210	Attn:	
Phone #: 575.746.8768	Fax #:	Address:	
Project #: 702520.040.01	Project Owner: Matador	City:	
Project Name: Arco5Fed01		State: Zip:	
Project Location: Eddy County		Phone #:	
Sampler Name: N. Rose		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	CL	BTEX	TPH
H233998	* 9-8-23																
1	C-1 1' ~~0-0.5'~~ 2'	C	1			✓					X		07/28	0712	✓	✓	✓

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

Relinquished By:	Date: 7/28/23	Received By: Jodi Henson	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 14:00		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: * customer requested depth correction. SRodriguez 9-8-23
	Time:		
Delivered By: (Circle One)	4.1°C #140	Sample Condition Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:			

† 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
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QUESTIONS

Action 303908

QUESTIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 303908
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nMCS0314035527**
Incident Name	**NMCS0314035527 ARCO 5 FEDERAL #001 @ 30-015-26197**
Incident Type	**Oil Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-015-26197] ARCO 5 FEDERAL #001**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	ARCO 5 FEDERAL #001
Date Release Discovered	04/21/2003
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Corrosion | Separator | Crude Oil | Released: 70 BBL | Recovered: 1 BBL | Lost: 69 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	*Not answered.*
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

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QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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.

I hereby agree and sign off to the above statement	Name: Jason Touchet Title: EHS Field Rep Email: jason.touchet@matadorresources.com Date: 01/23/2024

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QUESTIONS (continued)

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QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Estimate or Other
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 300 and 500 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 200 and 300 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	40.9
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	228
GRO+DRO (EPA SW-846 Method 8015M)	276.7
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	
On what date will (or did) the final sampling or liner inspection occur	12/21/2023
On what date will (or was) the remediation complete(d)	12/21/2023
What is the estimated surface area (in square feet) that will be reclaimed	100
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	7.7
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	*Not answered.*
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	Yes
What is the name of the NMED facility	Lea Land halfway facility
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Jason Touchet Title: EHS Field Rep Email: jason.touchet@matadorresources.com Date: 01/23/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

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QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**295783**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**12/21/2023**
What was the (estimated) number of samples that were to be gathered	**5**
What was the sampling surface area in square feet	**96**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	100
What was the total volume (cubic yards) remediated	7.7
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	n/a

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 (in .pdf format) 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.

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.

I hereby agree and sign off to the above statement	Name: Jason Touchet Title: EHS Field Rep Email: jason.touchet@matadorresources.com Date: 01/23/2024

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QUESTIONS (continued)

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QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation Closure approved. All areas not reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as practical. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	2/1/2024