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TALON LPE

Soil Assessment and Remediation Work Plan

Todd 36 State #001 Water Line
Eddy County, New Mexico
API # 30-015-20341, NAB1703948537 (2RP-4105)

Prepared For:

Devon Energy Production Company
6488 Seven Rivers Highway
Artesia, New Mexico 88210

Prepared By:

TALON/LPE
408 West Texas Avenue
Artesia, New Mexico 88210

December 10, 2020

Mr. Mike Bratcher
NMOCD District 2
811 S. 1st Street
Artesia, NM 88210

Subject: **Soil Assessment and Remediation Work Plan**
Todd 36 State #001 Water Line
Eddy County, New Mexico
API # 30-015-20341, NAB1703948537 (2RP-4105)

Dear Mr. Bratcher,

Devon Energy Production Company (Devon Energy) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities are contained herein.

Site Information

The Todd 36 State #001 Water Line is located approximately thirty-five (35) miles southeast of Carlsbad, New Mexico. The legal location for this release is Unit Letter I, Section 26, Township 23 South and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.269610 North and -103.744095 West. A site plan is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Kimbrough-Berino fine sands, 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to middle Pleistocene in age and is comprised of fine sand from eolian deposits. Drainage courses in this area are typically dry.

The New Mexico Office of the State Engineer web site indicates that the nearest depth to groundwater is 430' below ground surface (BGS). See Appendix II for the referenced groundwater data. The incident occurred in a low potential karst area.

Site Characterization

Pursuant to Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 of the New Mexico Administrative Code (NMAC), if a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater.

Approximate Depth to Groundwater	**430 Feet/BGS**
☐Yes ☒No	Within 300 feet of any continuously flowing watercourse or any other significant watercourse
☐Yes ☒No	Within 200 feet of any lakebed, sinkhole or playa lake
☐Yes ☒No	Within 300 feet from an occupied permanent residence, school, hospital, institution or church
☐Yes ☒No	Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes
☐Yes ☒No	Within 1000 feet of any fresh water well or spring
☐Yes ☒No	Within incorporated municipal boundaries or within a defined Municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978
☐Yes ☒No	Within 300 feet of a wetland
☐Yes ☒No	Within the area overlying a subsurface mine
☐Yes ☒No	Within an unstable area
☐Yes ☒No	Within a 100-year floodplain

While this release does not meet any of the criteria listed above, the impacted pipeline right-of-way is considered to be pasture area. Therefore, the closure criteria for this site are as follows:

Table I
Closure Criteria for Soils Impacted by a Release

Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤ 50 feet	Chloride***	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

Incident Description

On January 28, 2017, a bull plug inside of a tin horn failed, releasing approximately 70 barrels (bbls) of produced water. A vacuum truck was able to recover approximately 2 bbls of this. The initial C-141 is attached in Appendix III. A site map illustrating the affected area is presented in Appendix I.

Site Assessment

On March 13, 2017, Talon mobilized personnel to conduct site assessment and soil sampling activities. Grab soil samples were collected within and around the impacted area utilizing a hand auger. Subsequent vertical delineation was performed by an air rotary drill rig, but access to the impacted area was impeded by the sandy nature of the site. Results from these sampling events are presented in the following data table. A complete laboratory report can be found in Appendix V.

Table 1 ***: March 2017 Soil Sample Analysis***

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	**Total TPH** (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg				100 mg/kg	600 mg/kg
S-1	0	3/13/2017	NT	NT	NT	NT	NT	-	ND
	1	3/13/2017	NT	NT	NT	NT	NT	-	ND
	2	3/13/2017	NT	NT	NT	NT	NT	-	ND
	3	3/13/2017	NT	NT	NT	NT	NT	-	ND
	4	3/13/2017	NT	NT	NT	NT	NT	-	ND
S-2	0	3/13/2017	NT	NT	NT	NT	NT	-	5440
	1	3/13/2017	NT	NT	NT	NT	NT	-	6960
	2	3/13/2017	NT	NT	NT	NT	NT	-	7100
	3	3/13/2017	NT	NT	NT	NT	NT	-	6320
	4	3/13/2017	NT	NT	NT	NT	NT	-	7700
	5	3/13/2017	NT	NT	NT	NT	NT	-	9300
S-3	0	3/13/2017	NT	NT	NT	NT	NT	-	5200
	1	3/13/2017	NT	NT	NT	NT	NT	-	7680
	2	3/13/2017	NT	NT	NT	NT	NT	-	5920
	3	3/13/2017	NT	NT	NT	NT	NT	-	14600
	4	3/13/2017	NT	NT	NT	NT	NT	-	13600
	5	3/13/2017	NT	NT	NT	NT	NT	-	12600
S-4	0	3/13/2017	NT	NT	NT	NT	NT	-	64
	1	3/13/2017	NT	NT	NT	NT	NT	-	32
	2	3/13/2017	NT	NT	NT	NT	NT	-	ND

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	**Total TPH** (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg				100 mg/kg	600 mg/kg
S-5	0	3/13/2017	NT	NT	NT	NT	NT	-	ND
	1	3/13/2017	NT	NT	NT	NT	NT	-	32
	2	3/13/2017	NT	NT	NT	NT	NT	-	ND
S-6	0	3/13/2017	NT	NT	NT	NT	NT	-	1260
	1	3/13/2017	NT	NT	NT	NT	NT	-	144
	2	3/13/2017	NT	NT	NT	NT	NT	-	6500
	3	3/13/2017	NT	NT	NT	NT	NT	-	6800
	4	3/13/2017	NT	NT	NT	NT	NT	-	12000
	5	3/13/2017	NT	NT	NT	NT	NT	-	10800
S-7	0	3/13/2017	NT	NT	NT	NT	NT	-	4320
	1	3/13/2017	NT	NT	NT	NT	NT	-	6800
	2	3/13/2017	NT	NT	NT	NT	NT	-	6240
	3	3/13/2017	NT	NT	NT	NT	NT	-	6480
	4	3/13/2017	NT	NT	NT	NT	NT	-	10800
	5	3/13/2017	NT	NT	NT	NT	NT	-	928
S-8	0	3/13/2017	NT	NT	NT	NT	NT	-	64
	1	3/13/2017	NT	NT	NT	NT	NT	-	16
	2	3/13/2017	NT	NT	NT	NT	NT	-	32
S-9	0	3/13/2017	NT	NT	NT	NT	NT	-	32
	1	3/13/2017	NT	NT	NT	NT	NT	-	16
	2	3/13/2017	NT	NT	NT	NT	NT	-	ND
S-10	0	3/13/2017	NT	NT	NT	NT	NT	-	ND
	1	3/13/2017	NT	NT	NT	NT	NT	-	ND
	2	3/13/2017	NT	NT	NT	NT	NT	-	16
S-11	0	3/13/2017	ND	ND	ND	123	NT	123.0	976
	1	3/13/2017	ND	ND	ND	285	NT	285.0	448
	2	3/13/2017	ND	ND	ND	239	NT	239.0	2560
	3	3/13/2017	ND	ND	ND	738	NT	738.0	3320
	4	3/13/2017	ND	ND	ND	2150	NT	2150.0	4320
	5	3/13/2017	ND	ND	ND	ND	NT	-	12200

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	**Total TPH** (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg				100 mg/kg	600 mg/kg
BH-1	6	3/16/2017	NT	NT	NT	NT	NT	-	272
	8	3/16/2017	NT	NT	NT	NT	NT	-	64
	10	3/16/2017	NT	NT	NT	NT	NT	-	80
	15	3/16/2017	NT	NT	NT	NT	NT	-	32
	20	3/16/2017	NT	NT	NT	NT	NT	-	96
	25	3/16/2017	NT	NT	NT	NT	NT	-	96
	30	3/16/2017	NT	NT	NT	NT	NT	-	128

ND= Analyte Not Detected
NT= Analyte Not Tested

On September 18, 2020, following client approval, Talon returned in order to vertically delineate the site using a skid-steer mounted Geoprobe (direct-push technology). Results from this and further sampling events can be found below.

Table 2 ***: September & October 2020 Soil Sample Analysis***

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	**Total TPH** (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg				100 mg/kg	600 mg/kg
S-2	0-1	9/18/2020	ND	ND	ND	ND	ND	-	10.9
	2	9/18/2020	ND	ND	ND	ND	ND	-	89.4
	3	9/18/2020	ND	ND	ND	ND	ND	-	149
	4	9/18/2020	ND	ND	ND	ND	ND	-	634
	6	9/18/2020	ND	ND	ND	ND	ND	-	2800
	8	9/18/2020	ND	ND	ND	ND	ND	-	6000
	10	9/18/2020	ND	ND	ND	ND	ND	-	7560
	12	9/18/2020	ND	ND	ND	ND	ND	-	7680
	15	10/15/2020	NT	NT	NT	NT	NT	-	65
	20	10/15/2020	NT	NT	NT	NT	NT	-	90

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	**Total TPH** (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg				100 mg/kg	600 mg/kg
S-3	0-1	9/18/2020	ND	ND	ND	ND	ND	-	16.9
	2	9/18/2020	ND	ND	ND	ND	ND	-	15.4
	3	9/18/2020	ND	ND	ND	ND	ND	-	63.7
	4	9/18/2020	ND	ND	ND	ND	ND	-	1280
	6	9/18/2020	ND	ND	ND	ND	ND	-	2060
	8	9/18/2020	ND	ND	ND	ND	ND	-	1530
	10	9/18/2020	ND	ND	ND	ND	ND	-	5590
	12	9/18/2020	ND	ND	ND	ND	ND	-	12.4
S-6	0-1	9/18/2020	ND	ND	ND	ND	ND	-	6360
	2	9/18/2020	ND	ND	ND	ND	ND	-	11.9
	3	9/18/2020	ND	ND	ND	ND	ND	-	23.8
	4	9/18/2020	ND	ND	ND	ND	ND	-	221
	6	9/18/2020	ND	ND	ND	ND	ND	-	575
	8	9/18/2020	ND	ND	ND	ND	ND	-	1760
	10	9/18/2020	ND	ND	ND	ND	ND	-	4230
	12	9/18/2020	ND	ND	ND	ND	ND	-	6840
	15	11/4/2020	NT	NT	NT	NT	NT	-	ND
	20	11/4/2020	NT	NT	NT	NT	NT	-	85
S-7	0-1	9/18/2020	ND	ND	ND	ND	ND	-	264
	2	9/18/2020	ND	ND	ND	ND	ND	-	19.3
	3	9/18/2020	ND	ND	ND	ND	ND	-	31.7
	4	9/18/2020	ND	ND	ND	ND	ND	-	225
	6	9/18/2020	ND	ND	ND	ND	ND	-	1050
	8	9/18/2020	ND	ND	ND	ND	ND	-	1180
	10	11/4/2020	NT	NT	NT	NT	NT	-	580
	12	11/4/2020	NT	NT	NT	NT	NT	-	86
S-11	0-1	9/18/2020	ND	ND	ND	ND	ND	-	8.42
	2	9/18/2020	ND	ND	ND	ND	ND	-	80
	3	9/18/2020	ND	ND	ND	ND	ND	-	807
	4	9/18/2020	ND	ND	ND	ND	ND	-	2090
	6	9/18/2020	ND	ND	ND	ND	ND	-	1250
	8	9/18/2020	ND	ND	ND	ND	ND	-	5560
	10	9/18/2020	ND	ND	ND	ND	ND	-	5690
	12	9/18/2020	ND	ND	ND	ND	ND	-	22.1

Proposed Remedial Actions

- At this time we are requesting that final remediation and reclamation be deferred until such time as all infrastructure is removed and the area is no longer in use for production operations, in accordance with 19.15.29.12 and 19.15.29.13 NMAC. The mitigating factors are:

    - There are several underground utilities, including fiberglass water lines and polylines conducting petroleum, running directly through and nearby the impact area. Any subsurface excavation could unintentionally impact one of these, causing greater harm to the local environment.

    - During this time period our soil boring data demonstrates that chloride ions have leached to depths of 3 to 4-feet BGS in most cases. This is below the root zone depth of the local shinnery sands ecosystem.

    - Water table depth is reported at 430’ BGS, and is therefore unlikely to be impacted by this release. A boring log detailing the subsurface profile of a site 0.17 miles away is included in Appendix II. No groundwater was encountered to a depth of 80-feet.

    - All vegetation surrounding the site appears to be healthy and could be adversely impacted by the mobilization of heavy equipment. In addition, any large vehicles and mechanized equipment are very likely to become immobilized due to the loose, sandy nature of the soil found here.

Closure

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

Respectfully submitted,

TALON/LPE

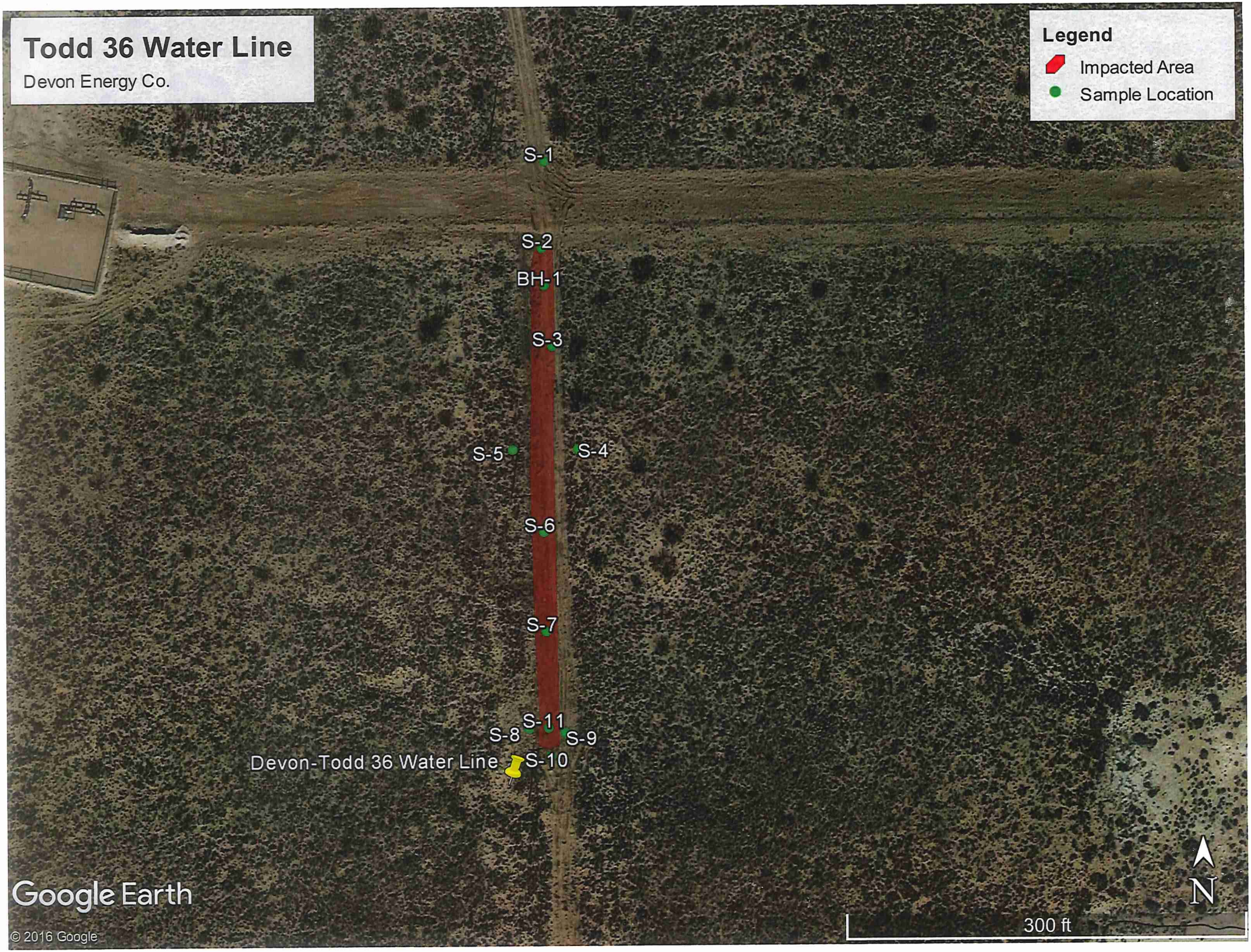
Brandon Sinclair
Project Manager

David J. Adkins
Regional Manager

Attachments:
Appendix I Site Maps
Appendix II Soil Survey, Groundwater Data & Boring Logs
Appendix III C-141 Forms
Appendix IV Photographic Documentation
Appendix V Laboratory Data

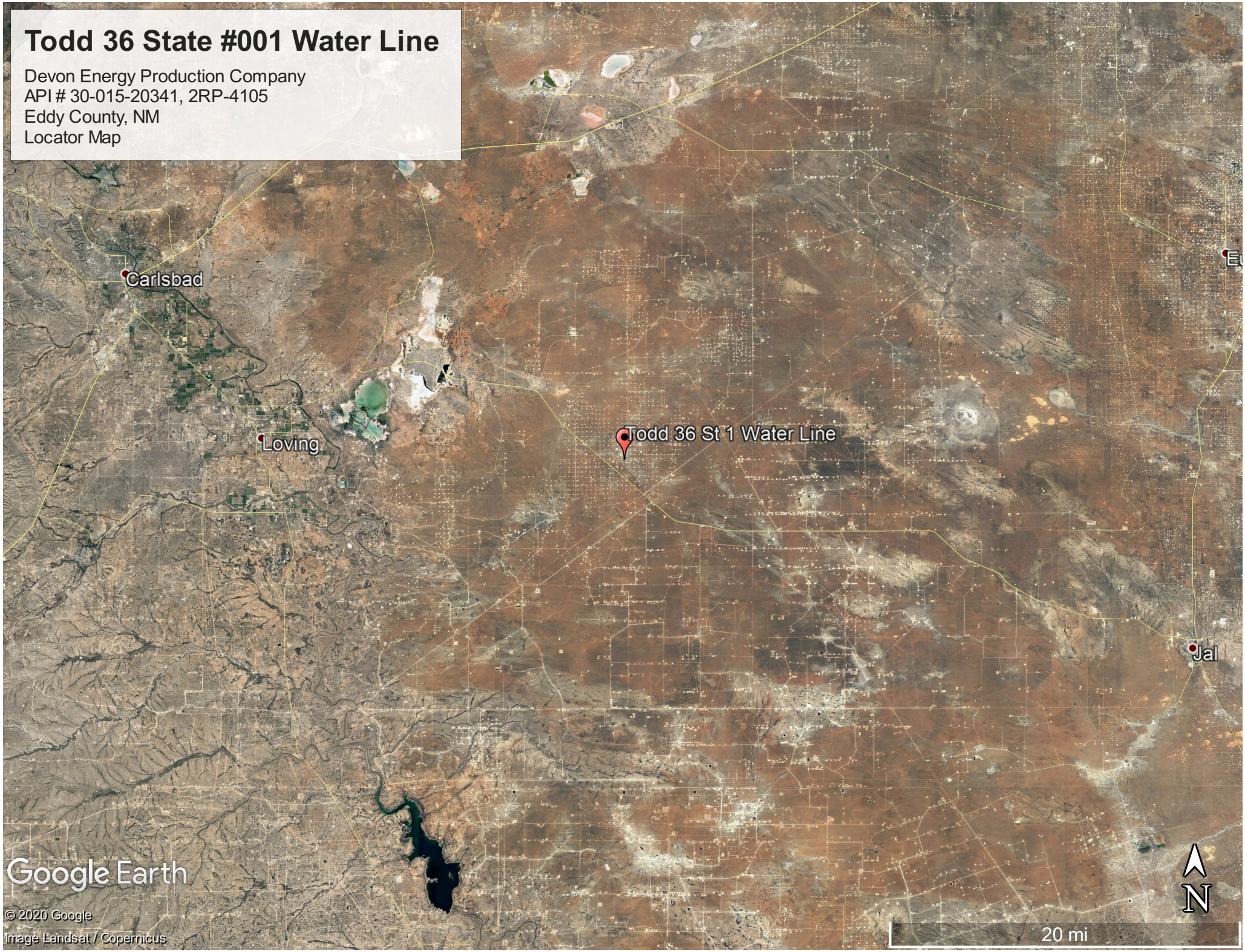
APPENDIX I

SITE MAPS


Todd 36 Water Line
Devon Energy Co.
Legend
Impacted Area
Sample Location
S-1
S-2
BH-1
S-3
S-5
S-4
S-6
S-7
S-11
S-8
S-9
Devon-Todd 36 Water Line
S-10
Google Earth
© 2016 Google
N
300 ft

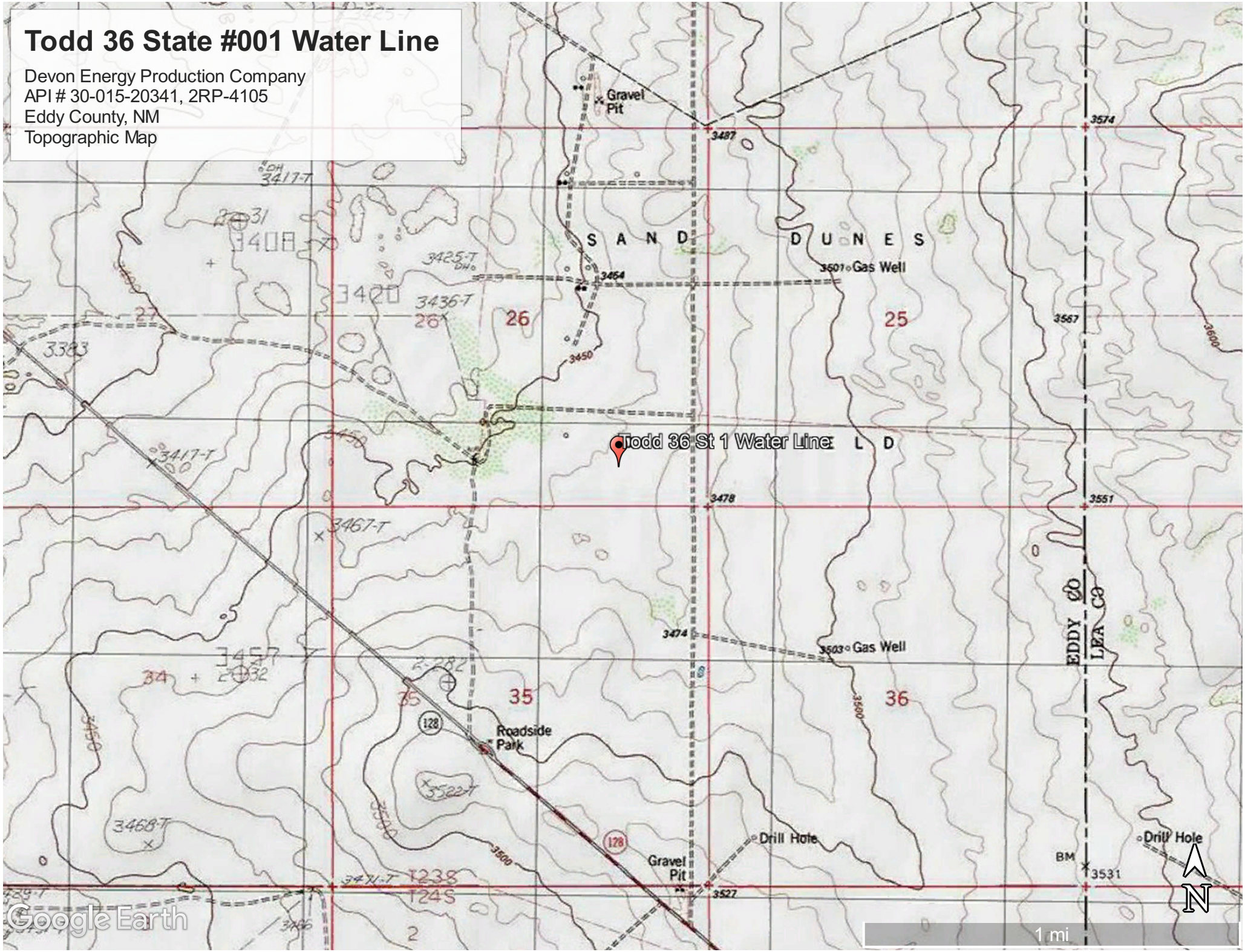
Todd 36 State #001 Water Line

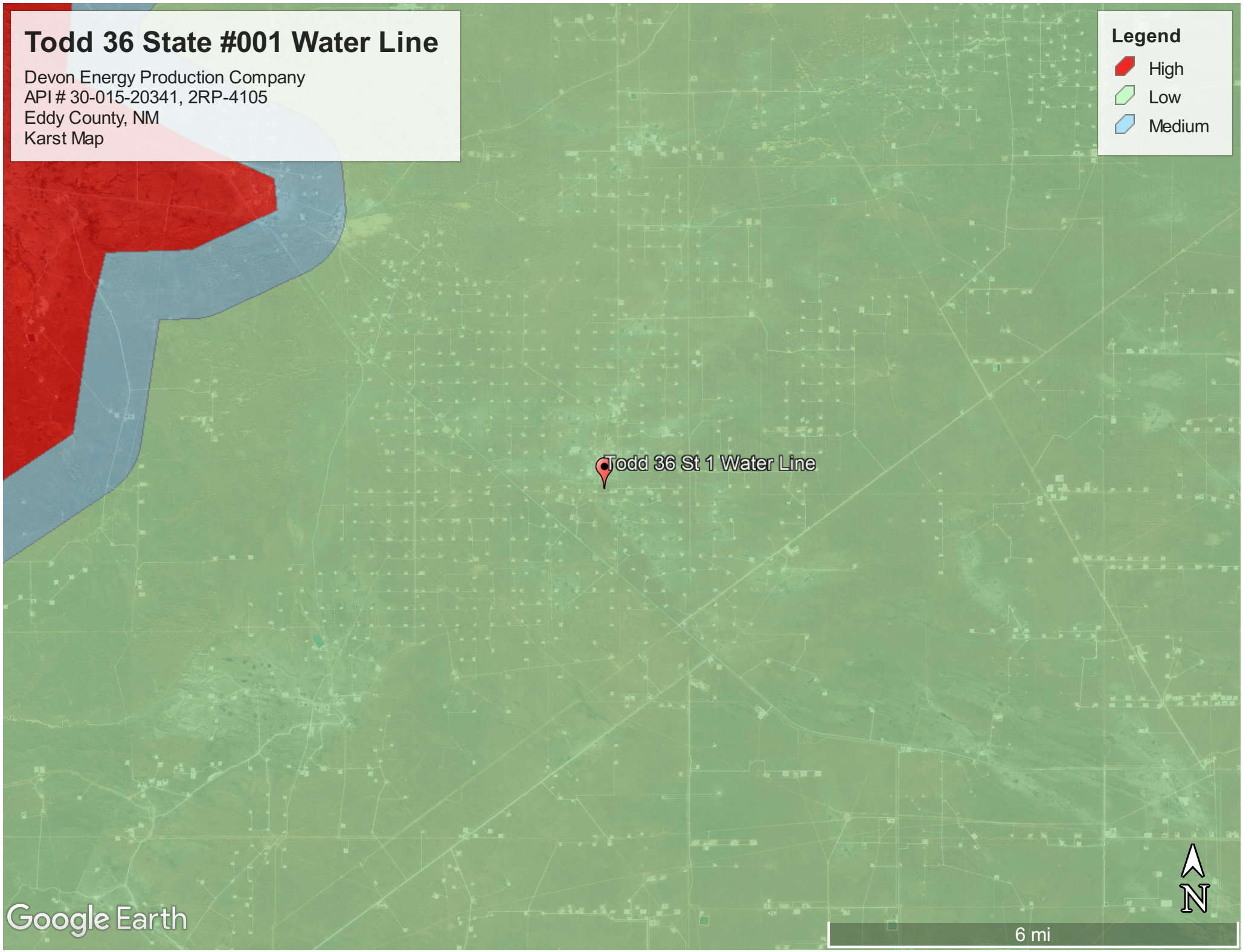
Devon Energy Production Company
API # 30-015-20341, 2RP-4105
Eddy County, NM
Locator Map



Todd 36 State #001 Water Line

Devon Energy Production Company
API # 30-015-20341, 2RP-4105
Eddy County, NM
Topographic Map




Todd 36 State #001 Water Line
Devon Energy Production Company
API # 30-015-20341, 2RP-4105
Eddy County, NM
Karst Map
Legend
High
Low
Medium
Todd 36 St 1 Water Line
N
Google Earth
6 mi

APPENDIX II

SOIL BORING LOG

GROUNDWATER DATA

SOIL SURVEY

FEMA FLOOD MAP

BORING LOG

Project No.: 700794.216.01
Site Name: Todd 36 St 1 Release
Location: Eddy County, NM
Date: 10/14/2020
Boring Number: B-2

Weather: Sunny Temp.: 85 °F
Logger: Brandon Sinclair
Field Instrument: CL Titration
Latitude: 32°, 16', 19.05" N
Longitude: 103°, 44', 41.17" W

Driller: Devin Londagin
Rig Type: Reich Drill
Bit Size: 5 7/8"
Drilling Method: Air Rotary
Sample Retrieval Method: Split Spoon

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	■	0-3'				Gray slightly silty fine Sand (SP-SM)	None	
	■	3-8'				Light brown fine Sand (SP)	None	
	■	8-10'				White fine Sand (SP) with varying amounts of cemented caliche	None	
	■	10-15'				Pinkish-white to light red/brown fine Sand (SP) with cemented calcite	None	
	■	15-30'				Red/brown fine Sand (SP) with trace amounts of silt	None	
	■	30-50'				Red/brown to brown fine sand (SP)	None	
	■	50-70'				Light red/brown fine sand (SP)	None	
	■	70-80'				Gray/brown fine sand (SP)	None	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	

Surface Elevation: _____
Notes: TD @ 80', Groundwater not encountered
Logger Initials: BS

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

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02348		C	ED	1	4	3	26	23S	31E	617648	3571068	636	700	430	270
C 02258		C	ED		3	2	26	23S	31E	618055	3571853*	871	662		
C 02405		CUB	ED		4	1	02	24S	31E	617690	3568631*	2453	275	160	115
C 02464		C	ED	2	3	1	02	24S	31E	617645	3568581	2512	320	205	115

Average Depth to Water: **265 feet**

Minimum Depth: **160 feet**

Maximum Depth: **430 feet**

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 618281.61 Northing (Y): 3571011.6 Radius: 3000

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

11/11/20 1:53 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

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: Alluvial fans, plains
Landform position (three-dimensional): Rise, talf
Down-slope shape: Linear, convex
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 capacity: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R042XC005NM - Deep Sand
Hydric soil rating: No

Description of Berino

Setting

Landform: Fan piedmonts, plains
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 capacity: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Active dune land

Percent of map unit: 15 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 16, Jun 8, 2020

National Flood Hazard Layer FIRMette

FEMA

103°44'58"W 32°16'26"N

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

1:6,000

103°44'20"W 32°15'55"N

Legend

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

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

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

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

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

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 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 11/13/2020 at 1:43 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

INITIAL C-141

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

State of New Mexico
Energy Minerals and Natural Resources

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

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 01 2017
RECEIVED

Form C-141
Revised August 8, 2011
Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nAB1703948537

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production Company 6137	**Contact** Wesley Ryan, Production Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88210	**Telephone No.** 575-390-5436
Facility Name Todd 36 State 1/ Injection line	**Facility Type** Salt Water Disposal

Surface Owner State/Federal	**Mineral Owner** State/Federal	**API No** 30-015-20341

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	36	23S	31E	1980	North	1980	West	Eddy

Latitude: N 32.2626877 **Longitude:** W -103.7336273

NATURE OF RELEASE

Type of Release Produced water	**Volume of Release** 70 BBLS	**Volume Recovered** 2 BBLS
Source of Release Bull plug	**Date and Hour of Occurrence** 1/28/2017 @ 1:30pm	**Date and Hour of Discovery** 1/28/2017 @ 1:30pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	**If YES, To Whom?** BLM-Shelly Tucker OCD-Mike Bratcher	
By Whom? Wesley Ryan, Production Foreman	**Date and Hour** **BLM-**1/28/2017 @ 7:05pm **OCD-**1/29/2017 @ 8:00am	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse** N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
The bull plug inside the tin horn became loose resulting in a release of 70 BBLS of produced water. The produced water released came from an injection line going to the Todd 36 State 1 SWD. The pumps were turned off and the transfer line was shut in to prevent further release. Repairs are being made to the bull plug in the tin horn.

Describe Area Affected and Cleanup Action Taken.*
Approximately 70 BBLS produced water was released from a bull plug inside the tin horn on the injection line going to the Todd 36 State 1 SWD onto the pasture. The released produced water flowed in a Northern direction away from the tin horn. The approximate size of the release was 100 yards by 8 feet wide. The vacuum truck recovered 2 BBLS produced water. A remediation contractor will be contacted for remediation.

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

Signature: Sarah Gallegos-Troublefield	OIL CONSERVATION DIVISION Signed By Mike Bratcher	
Printed Name: Sarah Gallegos-Troublefield	Approved by Environmental Specialist:	
Title: Field Admin Support	Approval Date: 2/7/17	Expiration Date: N/A
E-mail Address: Sarah.Gallegos-Troublefield@dvn.com	Conditions of Approval: See attached	Attached X
Date: 1/31/2017 Phone: 575.748.1864		

* Attach Additional Sheets If Necessary

2RP-4105

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 2/1/17 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4105 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in Artesia on or before 3/15/17. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Bratcher, Mike, EMNRD

From: Gallegos-Troublefield, Sarah <Sarah.Gallegos-Troublefield@dvn.com>
Sent: Wednesday, February 1, 2017 10:16 AM
To: Tucker, Shelly; jamos@blm.gov; Weaver, Crystal, EMNRD; Bratcher, Mike, EMNRD
Cc: Fulks, Brett; Shoemaker, Mike
Subject: Todd 36 State 1_70 BBLS PW_1-28-2017_Initial C-141
Attachments: Todd 36 State 1_70 BBLS PW_1-28-2017_GIS Image.pdf; Todd 36 State 1_70 BBLS PW_1-28-2017_Initial C-141.doc

Good Morning,

Please find attached the Initial C-141 and GIS Image of the Todd 36 State 1 release of 70 BBLS produced water that occurred on 1/28/2017. Please be advised that the blue dot on the GIS Image represents the approximate location of the origin of release.

Please contact me with any questions you may have.

Thank you very much and have a wonderful day.

Respectfully,

Sarah Gallegos-Troublefield
Field Admin Support
Production

Devon Energy Corporation
P.O. Box 250
Artesia, NM 88211
575 748 1864 Direct Line

devon

State of New Mexico
Oil Conservation Division

Incident ID	NAB1703948537
District RP	2RP-4105
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?	430 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NAB1703948537
District RP	2RP-4105
Facility ID	
Application ID	

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Printed Name: Brandon Sinclair

Title: Environmental Project Manager

Signature: Brandon Sinclair

Date: 11-13-2020

email: bsinclair@talonlpe.com

Telephone: 575-746-8768

OCD Only

Received by: _____

Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1703948537
District RP	2RP-4105
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☒ Extents of contamination must be fully delineated.

☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Brandon Sinclair — Title: Environmental Project Manager

Signature: _____ — Date: 11-11-2020

email: bsinclair@talonlpe.com — Telephone: 575-746-8768

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

APPENDIX IV

PHOTOGRAPHIC DOCUMENTATION

Todd 36 State #001 Water Line Assessment Photographs

Todd 36 State #001 Water Line Assessment Photographs

Todd 36 State #001 Water Line Assessment Photographs

APPENDIX V

LABORATORY DATA

CARDINAL Laboratories

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

March 16, 2017

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: TODD 36 ST #1

Enclosed are the results of analyses for samples received by the laboratory on 03/14/17 14:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S-1 0' (H700666-01)

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	03/15/2017	ND	432	108	400	3.77	

Sample ID: S-1 1' (H700666-02)

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	03/15/2017	ND	432	108	400	3.77	

Sample ID: S-1 2' (H700666-03)

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	03/15/2017	ND	432	108	400	3.77	

Sample ID: S-1 3' (H700666-04)

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	03/15/2017	ND	432	108	400	3.77	

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
KIMBERLY WILSON
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S-1 4' (H700666-05)

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	03/15/2017	ND	432	108	400	3.77	

Sample ID: S- 2 0' (H700666-06)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5440**	16.0	03/15/2017	ND	432	108	400	3.77	

Sample ID: S-2 1' (H700666-07)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6960**	16.0	03/15/2017	ND	432	108	400	3.77	

Sample ID: S- 2 2' (H700666-08)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7100**	16.0	03/15/2017	ND	416	104	400	0.00	QM-07

Sample ID: S- 2 3' (H700666-09)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6320**	16.0	03/15/2017	ND	416	104	400	0.00	

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
KIMBERLY WILSON
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 2 4' (H700666-10)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7700**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 2 5' (H700666-11)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**9300**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 3 0' (H700666-12)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5200**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 3 1' (H700666-13)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7680**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 3 2' (H700666-14)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5920**	16.0	03/15/2017	ND	416	104	400	0.00	

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
KIMBERLY WILSON
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 3 3' (H700666-15)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**14600**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 3 4' (H700666-16)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**13600**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 3 5' (H700666-17)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**12600**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 4 0' (H700666-18)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 4 1' (H700666-19)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	03/15/2017	ND	416	104	400	0.00	

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
KIMBERLY WILSON
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 4 2' (H700666-20)

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	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 5 0' (H700666-21)

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	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 5 1' (H700666-22)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 5 2' (H700666-23)

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	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 6 0' (H700666-24)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1260**	16.0	03/15/2017	ND	416	104	400	0.00	

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

Analytical Results For:

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

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 6 1' (H700666-25)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 6 2' (H700666-26)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6500**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 6 3' (H700666-27)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6800**	16.0	03/15/2017	ND	416	104	400	0.00	

Sample ID: S- 6 4' (H700666-28)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**12000**	16.0	03/15/2017	ND	400	100	400	7.69	QM-07

Sample ID: S- 6 5' (H700666-29)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**10800**	16.0	03/15/2017	ND	400	100	400	7.69	

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Analytical Results For:

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KIMBERLY WILSON
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 7 0' (H700666-30)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4320**	16.0	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 7 1' (H700666-31)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6800**	16.0	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 7 2' (H700666-32)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6240**	16.0	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 7 3' (H700666-33)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6480**	16.0	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 7 4' (H700666-34)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**10800**	16.0	03/15/2017	ND	400	100	400	7.69	

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Analytical Results For:

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

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 7 5' (H700666-35)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**928**	16.0	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 8 0' (H700666-36)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 8 1' (H700666-37)

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	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 8 2' (H700666-38)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 9 0' (H700666-39)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	03/15/2017	ND	400	100	400	7.69	

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Analytical Results For:

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

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 9 1' (H700666-40)

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	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 9 2' (H700666-41)

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	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 10 0' (H700666-42)

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	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 10 1' (H700666-43)

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	03/15/2017	ND	400	100	400	7.69	

Sample ID: S- 10 2' (H700666-44)

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	03/15/2017	ND	400	100	400	7.69	

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Analytical Results For:

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KIMBERLY WILSON
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 11 0' (H700666-45)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/15/2017	ND	1.97	98.6	2.00	1.14	
Toluene*	<0.050	0.050	03/15/2017	ND	1.84	91.9	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/15/2017	ND	1.83	91.5	2.00	1.59	
Total Xylenes*	<0.150	0.150	03/15/2017	ND	5.22	86.9	6.00	1.74	
Total BTEX	<0.300	0.300	03/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**976**	16.0	03/15/2017	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/15/2017	ND	221	111	200	1.31	
DRO >C10-C28	**123**	10.0	03/15/2017	ND	234	117	200	2.19	

Surrogate: 1-Chlorooctane *112 %* *25.1-158*

Surrogate: 1-Chlorooctadecane *139 %* *26.8-170*

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Analytical Results For:

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

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 11 1' (H700666-46)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/15/2017	ND	1.97	98.6	2.00	1.14	
Toluene*	<0.050	0.050	03/15/2017	ND	1.84	91.9	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/15/2017	ND	1.83	91.5	2.00	1.59	
Total Xylenes*	<0.150	0.150	03/15/2017	ND	5.22	86.9	6.00	1.74	
Total BTEX	<0.300	0.300	03/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	03/15/2017	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	03/15/2017	ND	221	111	200	1.31	
DRO >C10-C28	**285**	50.0	03/15/2017	ND	234	117	200	2.19	

Surrogate: 1-Chlorooctane *107 %* *25.1-158*

Surrogate: 1-Chlorooctadecane *133 %* *26.8-170*

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Analytical Results For:

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

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 11 2' (H700666-47)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/15/2017	ND	1.97	98.6	2.00	1.14	
Toluene*	<0.050	0.050	03/15/2017	ND	1.84	91.9	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/15/2017	ND	1.83	91.5	2.00	1.59	
Total Xylenes*	<0.150	0.150	03/15/2017	ND	5.22	86.9	6.00	1.74	
Total BTEX	<0.300	0.300	03/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2560**	16.0	03/15/2017	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	03/15/2017	ND	221	111	200	1.31	
DRO >C10-C28	**239**	50.0	03/15/2017	ND	234	117	200	2.19	

Surrogate: 1-Chlorooctane *112 %* *25.1-158*

Surrogate: 1-Chlorooctadecane *136 %* *26.8-170*

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Analytical Results For:

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

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 11 3' (H700666-48)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/15/2017	ND	1.97	98.6	2.00	1.14	
Toluene*	<0.050	0.050	03/15/2017	ND	1.84	91.9	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/15/2017	ND	1.83	91.5	2.00	1.59	
Total Xylenes*	<0.150	0.150	03/15/2017	ND	5.22	86.9	6.00	1.74	
Total BTEX	<0.300	0.300	03/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3320**	16.0	03/15/2017	ND	400	100	400	7.69	QM-07

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	03/15/2017	ND	221	111	200	1.31	
DRO >C10-C28	**738**	50.0	03/15/2017	ND	234	117	200	2.19	

Surrogate: 1-Chlorooctane *111 %* *25.1-158*

Surrogate: 1-Chlorooctadecane *158 %* *26.8-170*

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Analytical Results For:

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

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 11 4' (H700666-49)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/15/2017	ND	1.97	98.6	2.00	1.14	
Toluene*	<0.050	0.050	03/15/2017	ND	1.84	91.9	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/15/2017	ND	1.83	91.5	2.00	1.59	
Total Xylenes*	<0.150	0.150	03/15/2017	ND	5.22	86.9	6.00	1.74	
Total BTEX	<0.300	0.300	03/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4320**	16.0	03/15/2017	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS **S-06**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	03/15/2017	ND	221	111	200	1.31	
DRO >C10-C28	**2150**	50.0	03/15/2017	ND	234	117	200	2.19	

Surrogate: 1-Chlorooctane *113 %* *25.1-158*

Surrogate: 1-Chlorooctadecane *175 %* *26.8-170*

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Analytical Results For:

TALON LPE
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ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	03/14/2017	Sampling Date:	03/13/2017
Reported:	03/16/2017	Sampling Type:	Soil
Project Name:	TODD 36 ST #1	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: S- 11 5' (H700666-50)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/15/2017	ND	1.97	98.6	2.00	1.14	
Toluene*	<0.050	0.050	03/15/2017	ND	1.84	91.9	2.00	1.47	
Ethylbenzene*	<0.050	0.050	03/15/2017	ND	1.83	91.5	2.00	1.59	
Total Xylenes*	<0.150	0.150	03/15/2017	ND	5.22	86.9	6.00	1.74	
Total BTEX	<0.300	0.300	03/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**12200**	16.0	03/15/2017	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/15/2017	ND	221	111	200	1.31	
DRO >C10-C28	<10.0	10.0	03/15/2017	ND	234	117	200	2.19	

Surrogate: 1-Chlorooctane *108 %* *25.1-158*

Surrogate: 1-Chlorooctadecane *116 %* *26.8-170*

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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

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Page 1 of 5

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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: P.O. #:
Project Manager: Kimberly Wilson	Company: Talon/LPE
Address: 408 W. Texas Ave.	Attn:
City: Artesia State: NM Zip: 88210	Address:
Phone #: 575-746-8768 Fax #: 575-746-8905	City:
Project #: 700794.216.01 Project Owner: Devon	State: Zip:
Project Name: Todd 36 St #1	Phone #:
Project Location: Eddy Cty	Fax #:
Sampler Name: Kim Wilson	

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: Chlorides	TPH	BTEX
H200666													3/13/17				
1	S-1 0'	C	1			X						X			X		
2	1'	C	1			X						X			X		
3	2'	C	1			X						X			X		
4	3'	C	1			X						X			X		
5	4'	C	1			X						X			X		
6	S-2 0'	C	1			X						X			X		
7	1'	C	1			X						X			X		
8	2'	C	1			X						X			X		
9	3'	C	1			X						X			X		
10	4'	C	1			X						X			X		

Relinquished By: Kim Wilson	Date: 3/14/17	Received By: Sheldon Hitchcock	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By: Sheldon Hitchcock	Time: 12:25	Received By: Tamara Oldaker	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One)	Date: 3-14-17	Sample Condition: Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	Time: 12:25	6.3°C	T.O. #15

REMARKS: Brought in directly from field T.O. 3/14/17

RUSH

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

CARDINAL Laboratories

Page 2 of 5

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: Kimberly Wilson	P.O. #:
Address: 408 W. Texas Ave.	Company: Talon/LPE
City: Artesia State: NM Zip: 88210	Attn:
Phone #: 575-746-8768 Fax #: 575-746-8905	Address:
Project #: 700794.216.01 Project Owner: Devon	City:
Project Name: Todd 36 St #1	State: Zip:
Project Location: Eddy Cty	Phone #:
Sampler Name: Kim Wilson	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: Chlorides	TPH	BTEX
H700666													3/13/17				
11	S-2 5'	G	1			X						X			X		
12	S-3 0'	G	1			X						X			X		
13	1'	G	1			X						X			X		
14	2'	G	1			X						X			X		
15	3'	G	1			X						X			X		
16	4'	G	1			X						X			X		
17	5'	G	1			X						X			X		
18	S-4 0'	G	1			X						X			X		
19	1'	G	1			X						X			X		
20	2'	G	1			X						X			X		

Relinquished By: Kim Wilson	Date: 3/14/17	Received By: Sheila Mirin	
Relinquished By: Sheila Mirin	Time: 12:25	Received By: Tamara Oldaker	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Date: 3-14-17 Time: 14:25	Sample Condition: Cool: Yes / Intact: Yes	CHECKED BY: (Initials) TP-#75
	1.3c	2nd: No / No	

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS: RUSH Brought in directly from field T.P. 3-14-17

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

Page 3 of 5

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: Kimberly Wilson	P.O. #:
Address: 408 W. Texas Ave.	Company: Talon/LPE
City: Artesia State: NM Zip: 88210	Attn:
Phone #: 575-746-8768 Fax #: 575-746-8905	Address:
Project #: 700794.216.01 Project Owner: Devon	City:
Project Name: Todd 36 St #1	State: Zip:
Project Location: Eddy Cty	Phone #:
Sampler Name: Kim Wilson	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: Chlorides	TPH	BTEX
H700666													3/13/17				
21	S-5 0'	G	1			X						X			X		
22	1'	G	1			X						X					
23	2'	G	1			X						X					
24	S-6 0'	G	1			X						X					
25	1'	G	1			X						X					
26	2'	G	1			X						X					
27	3'	G	1			X						X					
28	4'	G	1			X						X					
29	5'	G	1			X						X					
30	S-7 0'	G	1			X						X					

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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: Kim Wilson	Date: 3/14/17	Received By: Sheila Jones	
Relinquished By: Sheila Jones	Time: 12:25	Received By: Tamara Oldaker	
Delivered By: (Circle One)	Date: 3-14-17	Sample Condition: Cool: Yes / Yes; Intact: Yes / No	CHECKED BY: (Initials) TO #15
Sampler - UPS - Bus - Other:	Time: 4:25	6.3c	

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS: RUSH Brought in directly from field T.O. 3-14-17

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

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Talon/LPE	BILL TO
Project Manager: Kimberly Wilson	P.O. #:
Address: 408 W. Texas Ave.	Company: Talon/LPE
City: Artesia State: NM Zip: 88210	Attn:
Phone #: 575-746-8768 Fax #: 575-746-8905	Address:
Project #: 700794.216.01 Project Owner: Devon	City:
Project Name: Todd 36 St #1	State: Zip:
Project Location: Eddy Cty	Phone #:
Sampler Name: Kim Wilson	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: Chlorides	TPH	BTEX
H700666																		
31	S-7	1'	G	1			X						X	3/13/17		X		
32		2'	G	1			X						X					
33		3'	G	1			X						X					
34		4'	G	1			X						X					
35		5'	G	1			X						X					
36	S-8	0'	G	1			X						X					
37		1'	G	1			X						X					
38		2'	G	1			X						X					
39	S-9	0'	G	1			X						X					
40		1'																

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 consequential 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: Kim Wilson	Date: 3/14/17 Time: 12:25	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: 3-14-17 Time: 14:25	Received By: Tamara Oldaker	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Cool: Yes Intact: Yes	CHECKED BY: (Initials) T.O. #15	REMARKS: RUSH Brought in directly from field T.O. 3-14-17

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

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Talon/LPE	BILL TO
Project Manager: Kimberly Wilson	P.O. #:
Address: 408 W. Texas Ave.	Company: Talon/LPE
City: Artesia State: NM Zip: 88210	Attn:
Phone #: 575-746-8768 Fax #: 575-746-8905	Address:
Project #: 700794.216.01 Project Owner: Devon	City:
Project Name: Todd 36 St #1	State: Zip:
Project Location: Eddy Cty	Phone #:
Sampler Name: Kim Wilson	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: Chlorides	TPH	BTEX
H700666		G	6			/						/	3/13/17		/		
41	S-9 2'	G	6			/						/			/		
42	S-10 0'	G	6			/						/			/		
43	1'	G	6			/						/			/		
44	2'	G	6			/					/				/	/	/
45	S-11 0'	G	6			/					/				/	/	/
46	1'	G	6			/					/				/	/	/
47	2'	G	6			/					/				/	/	/
48	3'	G	6			/					/				/	/	/
49	4'	G	6			/					/				/	/	/
50	5'	G	6			/					/		↓		/	/	/

Relinquished By: Kim Wilson	Date: 3/14/17	Received By: Sheldon Hitson	
	Time: 12:25		
Relinquished By: Sheldon Hitson	Date: 3-14-17	Received By: Tamara Oldaker	
	Time: 14:25		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials) T.O. #15	

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS: Rush Brought in directly from field T: 3/14/17

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

CARDINAL Laboratories

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

March 20, 2017

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: TODD 36 WATERLINE

Enclosed are the results of analyses for samples received by the laboratory on 03/16/17 16:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	03/16/2017	Sampling Date:	03/16/2017
Reported:	03/20/2017	Sampling Type:	Soil
Project Name:	TODD 36 WATERLINE	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: BH - 1 6' (H700699-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**272**	16.0	03/20/2017	ND	432	108	400	3.77	

Sample ID: BH - 1 8' (H700699-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	03/20/2017	ND	432	108	400	3.77	

Sample ID: BH - 1 10' (H700699-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	03/20/2017	ND	432	108	400	3.77	

Sample ID: BH - 1 15' (H700699-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	03/20/2017	ND	432	108	400	3.77	

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
KIMBERLY WILSON
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	03/16/2017	Sampling Date:	03/16/2017
Reported:	03/20/2017	Sampling Type:	Soil
Project Name:	TODD 36 WATERLINE	Sampling Condition:	** (See Notes)
Project Number:	700794.216.01	Sample Received By:	Tamara Oldaker
Project Location:	EDDY CO.		

Sample ID: BH - 1 20' (H700699-05)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	03/20/2017	ND	432	108	400	3.77	

Sample ID: BH - 1 25' (H700699-06)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	03/20/2017	ND	432	108	400	3.77	

Sample ID: BH - 1 30' (H700699-07)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	03/20/2017	ND	432	108	400	3.77	

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

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:	D. Adkins	**P.O. #:**	
Address:	408 W. Texas Ave.	**Company:**	Talon/LPE
City:	Artesia **State:** NM **Zip:** 88210	**Attn:**	
Phone #:	575-746-8768 **Fax #:** 575-746-8905	**Address:**	
Project #:	700744.216.01 **Project Owner:** Devon	**City:**	
Project Name:	Todd 36 Water Line	**State:** **Zip:**	
Project Location:		**Phone #:**	
Sampler Name:	S. Hitchcock	**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	Chlorides
H700699-1	BH-1 6'	G	1			/					/		3/16/17	2:00	/
2	BH-1 8'	G	1			/					/			2:10	/
3	BH-1 10'	G	1			/					/			2:20	/
4	BH-1 15'	G	1			/					/			2:30	/
5	BH-1 20'	G	1			/					/			2:35	/
6	BH-1 25'	G	1			/					/			2:46	/
7	BH-1 30'	G	1			/					/			2:45	/

Relinquished By:	Date: 3/16/17	**Received By:**	
	Time: 3:15p		
Relinquished By:	Date: 3-16-17	**Received By:**	
	Time: 16:45		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	25.9°C	**Sample Condition** Cool: Yes / No; Intact: Yes / No	**CHECKED BY: (Initials)** T.O. #75

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

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

eurofins | Environment Testing Xenco

Analytical Report 673399

for

Talon LPE-Artesia

Project Manager: R Pons

Todd 36 Waterline

2RP-4150

09.28.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

09.28.2020

Project Manager: **R Pons**
Talon LPE-Artesia
408 West Texas St.
Artesia, NM 88210

Reference: Eurofins Xenco, LLC Report No(s): **673399**
Todd 36 Waterline
Project Address: Eddy County, New Mexico

R Pons:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 673399. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 673399 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Sample Cross Reference 673399

Talon LPE-Artesia, Artesia, NM

Todd 36 Waterline

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-2, 0-1'	S	09.18.2020 10:00		673399-001
S-2, 2'	S	09.18.2020 10:05		673399-002
S-2, 3'	S	09.18.2020 10:10		673399-003
S-2, 4'	S	09.18.2020 10:15		673399-004
S-2, 6'	S	09.18.2020 10:25		673399-005
S-2, 8'	S	09.18.2020 10:30		673399-006
S-2, 10'	S	09.18.2020 10:35		673399-007
S-2, 12'	S	09.18.2020 10:45		673399-008
S-3, 0-1'	S	09.18.2020 11:00		673399-009
S-3, 2'	S	09.18.2020 11:05		673399-010
S-3, 3'	S	09.18.2020 11:10		673399-011
S-3, 4'	S	09.18.2020 11:15		673399-012
S-3, 6'	S	09.18.2020 11:25		673399-013
S-3, 8'	S	09.18.2020 11:30		673399-014
S-3, 10'	S	09.18.2020 11:40		673399-015
S-3, 12'	S	09.18.2020 11:45		673399-016
S-6, 0-1'	S	09.18.2020 12:05		673399-017
S-6, 2'	S	09.18.2020 12:10		673399-018
S-6, 3'	S	09.18.2020 12:20		673399-019
S-6, 4'	S	09.18.2020 12:25		673399-020
S-6, 6'	S	09.18.2020 12:35		673399-021
S-6, 8'	S	09.18.2020 12:40		673399-022
S-6, 10'	S	09.18.2020 12:50		673399-023
S-6, 12'	S	09.18.2020 12:55		673399-024
S-7, 0-1'	S	09.18.2020 13:10		673399-025
S-7, 2'	S	09.18.2020 13:15		673399-026
S-7, 3'	S	09.18.2020 13:20		673399-027
S-7, 4'	S	09.18.2020 13:25		673399-028
S-7, 6'	S	09.18.2020 13:40		673399-029
S-7, 8'	S	09.18.2020 13:45		673399-030
S-11, 0-1'	S	09.18.2020 14:00		673399-031
S-11, 2'	S	09.18.2020 14:05		673399-032
S-11, 3'	S	09.18.2020 14:10		673399-033
S-11, 4'	S	09.18.2020 14:20		673399-034
S-11, 6'	S	09.18.2020 14:25		673399-035
S-11, 8'	S	09.18.2020 14:45		673399-036
S-11, 10'	S	09.18.2020 14:50		673399-037
S-11, 12'	S	09.18.2020 15:00		673399-038

CASE NARRATIVE

Client Name: Talon LPE-Artesia

Project Name: Todd 36 Waterline

Project ID: *2RP-4150*
Work Order Number(s): *673399*

Report Date: *09.28.2020*
Date Received: *09.23.2020*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results
673399

Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-2, 0-1'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-001 Date Collected: 09.18.2020 10:00 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**10.9**	9.90	0.350	mg/kg	09.24.2020 15:08		1

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138023 Date Prep: 09.24.2020 11:00

Prep seq: 7712008

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	09.24.2020 17:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.8	11.4	mg/kg	09.24.2020 17:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	09.24.2020 17:12	U	1
Total TPH	PHC635	<11.4		11.4	mg/kg	09.24.2020 17:12	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	125	70 - 135	%		
o-Terphenyl	112	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138185 Date Prep: 09.25.2020 09:03

Prep seq: 7712103

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	09.25.2020 18:05	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	09.25.2020 18:05	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	09.25.2020 18:05	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	09.25.2020 18:05	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	09.25.2020 18:05	U	1
Total Xylenes	1330-20-7	<0.000402		0.000402	mg/kg	09.25.2020 18:05	U	
Total BTEX		<0.000402		0.000402	mg/kg	09.25.2020 18:05	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	97	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-2, 2'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-002 Date Collected: 09.18.2020 10:05 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**89.4**	9.92	0.351	mg/kg	09.24.2020 15:24		1

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138023 Date Prep: 09.24.2020 11:00

Prep seq: 7712008

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	49.9	13.9	mg/kg	09.24.2020 17:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.9	11.4	mg/kg	09.24.2020 17:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.9	11.4	mg/kg	09.24.2020 17:33	U	1
Total TPH	PHC635	<11.4		11.4	mg/kg	09.24.2020 17:33	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	121	70 - 135	%		
o-Terphenyl	111	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138185 Date Prep: 09.25.2020 09:03

Prep seq: 7712103

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000482	0.00198	0.000482	mg/kg	09.25.2020 18:17	U	1
Toluene	108-88-3	<0.000524	0.00198	0.000524	mg/kg	09.25.2020 18:17	U	1
Ethylbenzene	100-41-4	<0.000403	0.00198	0.000403	mg/kg	09.25.2020 18:17	U	1
m,p-Xylenes	179601-23-1	<0.000748	0.00397	0.000748	mg/kg	09.25.2020 18:17	U	1
o-Xylene	95-47-6	<0.000400	0.00198	0.000400	mg/kg	09.25.2020 18:17	U	1
Total Xylenes	1330-20-7	<0.000400		0.000400	mg/kg	09.25.2020 18:17	U	
Total BTEX		<0.000400		0.000400	mg/kg	09.25.2020 18:17	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	91	70 - 130	%		
4-Bromofluorobenzene	91	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-2, 3'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-003 Date Collected: 09.18.2020 10:10 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**149**	9.94	0.352	mg/kg	09.24.2020 15:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138023 Date Prep: 09.24.2020 11:00

Prep seq: 7712008

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	09.24.2020 17:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	09.24.2020 17:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	09.24.2020 17:53	U	1
Total TPH	PHC635	<11.5		11.5	mg/kg	09.24.2020 17:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	119	70 - 135	%		
o-Terphenyl	108	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138185 Date Prep: 09.25.2020 09:03

Prep seq: 7712103

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000488	0.00201	0.000488	mg/kg	09.25.2020 18:39	U	1
Toluene	108-88-3	<0.000531	0.00201	0.000531	mg/kg	09.25.2020 18:39	U	1
Ethylbenzene	100-41-4	<0.000409	0.00201	0.000409	mg/kg	09.25.2020 18:39	U	1
m,p-Xylenes	179601-23-1	<0.000758	0.00402	0.000758	mg/kg	09.25.2020 18:39	U	1
o-Xylene	95-47-6	<0.000406	0.00201	0.000406	mg/kg	09.25.2020 18:39	U	1
Total Xylenes	1330-20-7	<0.000406		0.000406	mg/kg	09.25.2020 18:39	U	
Total BTEX		<0.000406		0.000406	mg/kg	09.25.2020 18:39	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	103	70 - 130	%		
4-Bromofluorobenzene	94	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-2, 4'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-004 Date Collected: 09.18.2020 10:15 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**634**	9.98	0.353	mg/kg	09.24.2020 15:35		1

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138023 Date Prep: 09.24.2020 11:00

Prep seq: 7712008

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	09.24.2020 18:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	09.24.2020 18:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	50.0	11.4	mg/kg	09.24.2020 18:13	U	1
Total TPH	PHC635	<11.4		11.4	mg/kg	09.24.2020 18:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	122	70 - 135	%		
o-Terphenyl	109	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138185 Date Prep: 09.25.2020 09:03

Prep seq: 7712103

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000489	0.00202	0.000489	mg/kg	09.25.2020 19:02	U	1
Toluene	108-88-3	<0.000532	0.00202	0.000532	mg/kg	09.25.2020 19:02	U	1
Ethylbenzene	100-41-4	<0.000409	0.00202	0.000409	mg/kg	09.25.2020 19:02	U	1
m,p-Xylenes	179601-23-1	<0.000760	0.00403	0.000760	mg/kg	09.25.2020 19:02	U	1
o-Xylene	95-47-6	<0.000406	0.00202	0.000406	mg/kg	09.25.2020 19:02	U	1
Total Xylenes	1330-20-7	<0.000406		0.000406	mg/kg	09.25.2020 19:02	U	
Total BTEX		<0.000406		0.000406	mg/kg	09.25.2020 19:02	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	94	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-2, 6'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-005 Date Collected: 09.18.2020 10:25 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**2800**	49.7	1.76	mg/kg	09.24.2020 15:40		5

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138023 Date Prep: 09.24.2020 11:00

Prep seq: 7712008

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.8	13.8	mg/kg	09.24.2020 18:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.8	11.4	mg/kg	09.24.2020 18:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.8	11.4	mg/kg	09.24.2020 18:33	U	1
Total TPH	PHC635	<11.4		11.4	mg/kg	09.24.2020 18:33	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	117	70 - 135	%		
o-Terphenyl	106	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138185 Date Prep: 09.25.2020 09:03

Prep seq: 7712103

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	09.25.2020 19:24	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	09.25.2020 19:24	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	09.25.2020 19:24	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	09.25.2020 19:24	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	09.25.2020 19:24	U	1
Total Xylenes	1330-20-7	<0.000402		0.000402	mg/kg	09.25.2020 19:24	U	
Total BTEX		<0.000402		0.000402	mg/kg	09.25.2020 19:24	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	92	70 - 130	%		
4-Bromofluorobenzene	98	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-2, 8'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-006 Date Collected: 09.18.2020 10:30 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**6000**	49.9	1.77	mg/kg	09.24.2020 15:57		5

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138023 Date Prep: 09.24.2020 11:00

Prep seq: 7712008

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	09.24.2020 18:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	09.24.2020 18:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	50.0	11.4	mg/kg	09.24.2020 18:53	U	1
Total TPH	PHC635	<11.4		11.4	mg/kg	09.24.2020 18:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	111	70 - 135	%		
o-Terphenyl	101	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138185 Date Prep: 09.25.2020 09:03

Prep seq: 7712103

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000483	0.00199	0.000483	mg/kg	09.25.2020 19:47	U	1
Toluene	108-88-3	<0.000525	0.00199	0.000525	mg/kg	09.25.2020 19:47	U	1
Ethylbenzene	100-41-4	<0.000404	0.00199	0.000404	mg/kg	09.25.2020 19:47	U	1
m,p-Xylenes	179601-23-1	<0.000749	0.00398	0.000749	mg/kg	09.25.2020 19:47	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	09.25.2020 19:47	U	1
Total Xylenes	1330-20-7	<0.000401		0.000401	mg/kg	09.25.2020 19:47	U	
Total BTEX		<0.000401		0.000401	mg/kg	09.25.2020 19:47	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	92	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-2, 10'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-007 Date Collected: 09.18.2020 10:35 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**7560**	50.1	1.77	mg/kg	09.24.2020 16:02		5

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138023 Date Prep: 09.24.2020 11:00

Prep seq: 7712008

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.8	49.9	13.8	mg/kg	09.24.2020 19:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.4	49.9	11.4	mg/kg	09.24.2020 19:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	49.9	11.4	mg/kg	09.24.2020 19:13	U	1
Total TPH	PHC635	<11.4		11.4	mg/kg	09.24.2020 19:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	119	70 - 135	%		
o-Terphenyl	108	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138185 Date Prep: 09.25.2020 09:03

Prep seq: 7712103

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	09.25.2020 20:09	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	09.25.2020 20:09	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	09.25.2020 20:09	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	09.25.2020 20:09	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	09.25.2020 20:09	U	1
Total Xylenes	1330-20-7	<0.000402		0.000402	mg/kg	09.25.2020 20:09	U	
Total BTEX		<0.000402		0.000402	mg/kg	09.25.2020 20:09	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	70 - 130	%		
4-Bromofluorobenzene	95	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-2, 12'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-008 Date Collected: 09.18.2020 10:45 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**7680**	50.1	1.77	mg/kg	09.24.2020 16:08		5

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138100 Date Prep: 09.24.2020 11:30

Prep seq: 7712024

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	09.24.2020 16:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	09.24.2020 16:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	09.24.2020 16:52	U	1
Total TPH	PHC635	<11.5		11.5	mg/kg	09.24.2020 16:52	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	125	70 - 135	%		
o-Terphenyl	119	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138185 Date Prep: 09.25.2020 09:03

Prep seq: 7712103

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000482	0.00198	0.000482	mg/kg	09.25.2020 20:32	U	1
Toluene	108-88-3	<0.000524	0.00198	0.000524	mg/kg	09.25.2020 20:32	U	1
Ethylbenzene	100-41-4	<0.000403	0.00198	0.000403	mg/kg	09.25.2020 20:32	U	1
m,p-Xylenes	179601-23-1	<0.000748	0.00397	0.000748	mg/kg	09.25.2020 20:32	U	1
o-Xylene	95-47-6	<0.000400	0.00198	0.000400	mg/kg	09.25.2020 20:32	U	1
Total Xylenes	1330-20-7	<0.000400		0.000400	mg/kg	09.25.2020 20:32	U	
Total BTEX		<0.000400		0.000400	mg/kg	09.25.2020 20:32	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	93	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-3, 0-1'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-009 Date Collected: 09.18.2020 11:00 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**16.9**	9.92	0.351	mg/kg	09.24.2020 16:14		1

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138100 Date Prep: 09.24.2020 11:30

Prep seq: 7712024

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	09.24.2020 17:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	09.24.2020 17:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.0	11.5	mg/kg	09.24.2020 17:12	U	1
Total TPH	PHC635	<11.5		11.5	mg/kg	09.24.2020 17:12	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	126	70 - 135	%		
o-Terphenyl	121	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138185 Date Prep: 09.25.2020 09:03

Prep seq: 7712103

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000482	0.00198	0.000482	mg/kg	09.25.2020 20:54	U	1
Toluene	108-88-3	<0.000524	0.00198	0.000524	mg/kg	09.25.2020 20:54	U	1
Ethylbenzene	100-41-4	<0.000403	0.00198	0.000403	mg/kg	09.25.2020 20:54	U	1
m,p-Xylenes	179601-23-1	<0.000748	0.00397	0.000748	mg/kg	09.25.2020 20:54	U	1
o-Xylene	95-47-6	<0.000400	0.00198	0.000400	mg/kg	09.25.2020 20:54	U	1
Total Xylenes	1330-20-7	<0.000400		0.000400	mg/kg	09.25.2020 20:54	U	
Total BTEX		<0.000400		0.000400	mg/kg	09.25.2020 20:54	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	101	70 - 130	%		
4-Bromofluorobenzene	87	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-3, 2'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-010 Date Collected: 09.18.2020 11:05 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**15.4**	9.94	0.352	mg/kg	09.24.2020 16:19		1

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138100 Date Prep: 09.24.2020 11:30

Prep seq: 7712024

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.2	13.9	mg/kg	09.24.2020 17:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.2	11.5	mg/kg	09.24.2020 17:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.2	11.5	mg/kg	09.24.2020 17:33	U	1
Total TPH	PHC635	<11.5		11.5	mg/kg	09.24.2020 17:33	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	122	70 - 135	%		
o-Terphenyl	117	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138186 Date Prep: 09.25.2020 14:39

Prep seq: 7712104

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000488	0.00201	0.000488	mg/kg	09.25.2020 18:05	U	1
Toluene	108-88-3	<0.000531	0.00201	0.000531	mg/kg	09.25.2020 18:05	U	1
Ethylbenzene	100-41-4	<0.000409	0.00201	0.000409	mg/kg	09.25.2020 18:05	U	1
m,p-Xylenes	179601-23-1	<0.000758	0.00402	0.000758	mg/kg	09.25.2020 18:05	U	1
o-Xylene	95-47-6	<0.000406	0.00201	0.000406	mg/kg	09.25.2020 18:05	U	1
Total Xylenes	1330-20-7	<0.000406		0.000406	mg/kg	09.25.2020 18:05	U	
Total BTEX		<0.000406		0.000406	mg/kg	09.25.2020 18:05	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	112	70 - 130	%		
4-Bromofluorobenzene	125	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-3, 3'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-011 Date Collected: 09.18.2020 11:10 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**63.7**	9.92	0.351	mg/kg	09.24.2020 16:25		1

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138100 Date Prep: 09.24.2020 11:30

Prep seq: 7712024

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	09.24.2020 17:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	09.24.2020 17:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	09.24.2020 17:53	U	1
Total TPH	PHC635	<11.5		11.5	mg/kg	09.24.2020 17:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	124	70 - 135	%		
o-Terphenyl	119	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138186 Date Prep: 09.25.2020 14:39

Prep seq: 7712104

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	09.25.2020 18:28	U	1
Toluene	108-88-3	<0.000529	0.00200	0.000529	mg/kg	09.25.2020 18:28	U	1
Ethylbenzene	100-41-4	<0.000407	0.00200	0.000407	mg/kg	09.25.2020 18:28	U	1
m,p-Xylenes	179601-23-1	<0.000755	0.00401	0.000755	mg/kg	09.25.2020 18:28	U	1
o-Xylene	95-47-6	<0.000404	0.00200	0.000404	mg/kg	09.25.2020 18:28	U	1
Total Xylenes	1330-20-7	<0.000404		0.000404	mg/kg	09.25.2020 18:28	U	
Total BTEX		<0.000404		0.000404	mg/kg	09.25.2020 18:28	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	100	70 - 130	%		
4-Bromofluorobenzene	116	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-3, 4'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-012 Date Collected: 09.18.2020 11:15 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1280**	49.7	1.76	mg/kg	09.24.2020 16:42		5

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138100 Date Prep: 09.24.2020 11:30

Prep seq: 7712024

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	09.24.2020 18:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.3	11.5	mg/kg	09.24.2020 18:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	09.24.2020 18:13	U	1
Total TPH	PHC635	<11.5		11.5	mg/kg	09.24.2020 18:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	125	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138186 Date Prep: 09.25.2020 14:39

Prep seq: 7712104

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000482	0.00198	0.000482	mg/kg	09.25.2020 18:50	U	1
Toluene	108-88-3	<0.000524	0.00198	0.000524	mg/kg	09.25.2020 18:50	U	1
Ethylbenzene	100-41-4	<0.000403	0.00198	0.000403	mg/kg	09.25.2020 18:50	U	1
m,p-Xylenes	179601-23-1	<0.000748	0.00397	0.000748	mg/kg	09.25.2020 18:50	U	1
o-Xylene	95-47-6	<0.000400	0.00198	0.000400	mg/kg	09.25.2020 18:50	U	1
Total Xylenes	1330-20-7	<0.000400		0.000400	mg/kg	09.25.2020 18:50	U	
Total BTEX		<0.000400		0.000400	mg/kg	09.25.2020 18:50	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	108	70 - 130	%		
4-Bromofluorobenzene	125	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-3, 6'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-013 Date Collected: 09.18.2020 11:25 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**2060**	49.5	1.75	mg/kg	09.24.2020 16:47		5

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138100 Date Prep: 09.24.2020 11:30

Prep seq: 7712024

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	09.24.2020 18:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.3	11.5	mg/kg	09.24.2020 18:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	09.24.2020 18:33	U	1
Total TPH	PHC635	<11.5		11.5	mg/kg	09.24.2020 18:33	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	125	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138186 Date Prep: 09.25.2020 14:39

Prep seq: 7712104

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	09.25.2020 19:13	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	09.25.2020 19:13	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	09.25.2020 19:13	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	09.25.2020 19:13	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	09.25.2020 19:13	U	1
Total Xylenes	1330-20-7	<0.000402		0.000402	mg/kg	09.25.2020 19:13	U	
Total BTEX		<0.000402		0.000402	mg/kg	09.25.2020 19:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	105	70 - 130	%		
4-Bromofluorobenzene	123	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-3, 8'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-014 Date Collected: 09.18.2020 11:30 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1530**	50.1	1.77	mg/kg	09.24.2020 17:04		5

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138100 Date Prep: 09.24.2020 11:30

Prep seq: 7712024

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.0	13.9	mg/kg	09.24.2020 18:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.0	11.5	mg/kg	09.24.2020 18:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.4	50.0	11.4	mg/kg	09.24.2020 18:53	U	1
Total TPH	PHC635	<11.4		11.4	mg/kg	09.24.2020 18:53	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	126	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138186 Date Prep: 09.25.2020 14:39

Prep seq: 7712104

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	09.25.2020 19:35	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	09.25.2020 19:35	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	09.25.2020 19:35	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	09.25.2020 19:35	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	09.25.2020 19:35	U	1
Total Xylenes	1330-20-7	<0.000402		0.000402	mg/kg	09.25.2020 19:35	U	
Total BTEX		<0.000402		0.000402	mg/kg	09.25.2020 19:35	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	102	70 - 130	%		
4-Bromofluorobenzene	113	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-3, 10'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-015 Date Collected: 09.18.2020 11:40 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**5590**	50.2	1.78	mg/kg	09.24.2020 17:10		5

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138100 Date Prep: 09.24.2020 11:30

Prep seq: 7712024

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1	13.9	mg/kg	09.24.2020 19:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.1	11.5	mg/kg	09.24.2020 19:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1	11.5	mg/kg	09.24.2020 19:13	U	1
Total TPH	PHC635	<11.5		11.5	mg/kg	09.24.2020 19:13	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	127	70 - 135	%		
o-Terphenyl	120	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138186 Date Prep: 09.25.2020 14:39

Prep seq: 7712104

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000489	0.00202	0.000489	mg/kg	09.25.2020 19:57	U	1
Toluene	108-88-3	<0.000532	0.00202	0.000532	mg/kg	09.25.2020 19:57	U	1
Ethylbenzene	100-41-4	<0.000409	0.00202	0.000409	mg/kg	09.25.2020 19:57	U	1
m,p-Xylenes	179601-23-1	<0.000760	0.00403	0.000760	mg/kg	09.25.2020 19:57	U	1
o-Xylene	95-47-6	<0.000406	0.00202	0.000406	mg/kg	09.25.2020 19:57	U	1
Total Xylenes	1330-20-7	<0.000406		0.000406	mg/kg	09.25.2020 19:57	U	
Total BTEX		<0.000406		0.000406	mg/kg	09.25.2020 19:57	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	104	70 - 130	%		
4-Bromofluorobenzene	124	70 - 130	%		

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Talon LPE-Artesia, Artesia, NM
Todd 36 Waterline

Sample Id: **S-3, 12'** Matrix: Soil Sample Depth:

Lab Sample Id: 673399-016 Date Collected: 09.18.2020 11:45 Date Received: 09.23.2020 15:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138099 Date Prep: 09.24.2020 13:22

Prep seq: 7712039

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**12.4**	10.1	0.357	mg/kg	09.24.2020 17:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: 8015

Analyst: DTH % Moist: Tech: DTH

Seq Number: 3138111 Date Prep: 09.24.2020 16:30

Prep seq: 7712043

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.0	50.3	14.0	mg/kg	09.25.2020 03:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<11.5	50.3	11.5	mg/kg	09.25.2020 03:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.3	11.5	mg/kg	09.25.2020 03:38	U	1
Total TPH	PHC635	<11.5		11.5	mg/kg	09.25.2020 03:38	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1-Chlorooctane	127	70 - 135	%		
o-Terphenyl	124	70 - 135	%		

Analytical Method: BTEX by EPA 8021B Prep Method: 5035A

Analyst: MAB % Moist: Tech: MAB

Seq Number: 3138186 Date Prep: 09.25.2020 14:39

Prep seq: 7712104

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Benzene	71-43-2	<0.000489	0.00202	0.000489	mg/kg	09.25.2020 20:20	U	1
Toluene	108-88-3	<0.000532	0.00202	0.000532	mg/kg	09.25.2020 20:20	U	1
Ethylbenzene	100-41-4	<0.000409	0.00202	0.000409	mg/kg	09.25.2020 20:20	U	1
m,p-Xylenes	179601-23-1	<0.000760	0.00403	0.000760	mg/kg	09.25.2020 20:20	U	1
o-Xylene	95-47-6	<0.000406	0.00202	0.000406	mg/kg	09.25.2020 20:20	U	1
Total Xylenes	1330-20-7	<0.000406		0.000406	mg/kg	09.25.2020 20:20	U	
Total BTEX		<0.000406		0.000406	mg/kg	09.25.2020 20:20	U	

Surrogate	% Recovery	Limits	Units	Analysis Date	Flag
1,4-Difluorobenzene	104	70 - 130	%		
4-Bromofluorobenzene	118	70 - 130	%		