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# **Closure Report**

Cooper 3 #006 Lea County, New Mexico API ID # 30-025-35204 Incident # nPAC0734734930

# **Prepared For:**

Matador Resources 5347 N. 26<sup>th</sup> Street 2<sup>nd</sup> Floor. Artesia, NM 88210

# **Prepared By:**

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

**August 9, 2023** 



#### **NMOCD**

506 W. Texas Ave Artesia, NM 88210

Subject: Closure Report

Cooper 3 #006

Lea County, New Mexico API # 30-025-35204

Incident # nPAC0734734930

To Whom It May Concern,

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

#### **Site Information**

The Cooper 3 #006 is located approximately eight miles southwest of Hobbs, New Mexico. The legal location for this release is Unit Letter B, Section 03, Township 20 South and Range 37 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.608223 and -103.2363205. A Site Location Map is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is comprised of Ratliff-Wink fine sandy loams, 0 to 3 percent slopes. The referenced soil data is presented in Appendix II. Per the New Mexico Bureau of Geology and Mineral Resources, the local geology consists of the Eolian and Piedmont deposits, Holocene to middle Pleistocene in age.

#### **Groundwater and Site Characterization**

Based on the New Mexico Office of the State Engineer Database, the nearest reported groundwater depth is 45 feet below ground surface (bgs) but is located greater than 0.5 miles from the subject site. The FEMA Flood Service Center does not locate the site in a 100-year flood plain. Further research of the Bureau of Land Management Karst data indicates that this site is situated within a low potential karst area. See Appendix II for the site characterization data.

Approximate Dept	th to Groundwater	45 feet bgs
☐Yes⊠No	Within 300 feet of any continuously flowing wa	atercourse or
☐Yes ⊠No	Within 200 feet of any lakebed, sinkhole or a p	olaya lake
□Yes ⊠No	Within 300 feet from an occupied permanent r school, hospital, institution or church	residence,
∐Yes ⊠No	Within 500 feet of a spring or a private, domes well used by less than five households for domestatering purposes	
∐Yes ⊠No	Within 1000 feet of any freshwater well or spri	ng
∐Yes ⊠No	Within incorporated municipal boundaries or w municipal freshwater well field covered under ordinance adopted pursuant to Section 3-2703	a municipal
∐Yes ⊠No	Within 300 feet of a wetland	
□Yes ⊠No	Within the area overlying a subsurface mine	
∐Yes ⊠No	Within an unstable area	
□Yes ⊠No	Within a 100-year floodplain	

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

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

#### **Incident Description**

Matador personnel noted a historical spill had been reported on December 13, 2007 and needed to be addressed. The C-141 submitted to the NMOCD, incident number nPAC0734734930, stated a hole was noted in the heater treater, resulting in the release of seven (7) barrels (bbls) of crude oil was released to the site and five (5) bbls were recovered. The site map is presented in Appendix I.

#### Site Assessment

On Janurary 10th, 2023, Talon personnel mobilized to the site to conduct an initial site assessment of the area where the former heater treater resided. The impacted area was photographed, sampled utilizing a hand auger, and mapped. All soil samples were properly packaged, preserved, and transported to Eurofins laboratories with the chain of custody for analysis of Total Chlorides (Method SM4500CI-B), TPH (EPA Method 8015M), and volatile organics (BTEX, EPA Method 8021B). Sample locations are shown on the attached Figure 2 (Appendix I) and the results of our sampling event are presented on the following data table.

**Table 1**Intial Site Assessment

Cooer 3 # 006									
Sample ID	Sample Date	Depth (BGS)	Benzene mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure 10 50 DRO + GRO + Criteria 19.15.29 NMAC mg/kg mg/kg combined = 100					_	100 mg/kg	600 mg/kg		
	1/10/2023	1'	ND	ND	25.5	173	ND	198.5	13.3
S-1	1/10/2023	2'	ND	ND	18.7	110	ND	128.7	20.9
	1/10/2023	3'	ND	ND	19.9	81.4	ND	101.3	93.2
S-2	1/10/2023	1'	ND	ND	17	119	ND	136	55.7
	1/10/2023	1'	ND	ND	17.9	123	ND	140.9	104
S-3	1/10/2023	2'	ND	ND	44	ND	ND	44	17.4
	1/10/2023	2.5'	ND	ND	41.7	131	ND	172.7	13.1
S-4	1/10/2023	1'	ND	ND	27.4	52.1	ND	79.5	107
S-5	1/10/2023	1'	ND	ND	ND	39.9	ND	39.9	19

**NOTES:** 

BGS Below ground

surface

mg/kg Milligrams per

mg/kg kilogram

**TPH** Total Petroleum Hydrocarbons

**GRO** Gasoline range organics

DRO Diesel range organicsMRO Motor oil range organics

**S** Sample

**C** Confirmation Sample

**SW** Sidewall Sample

TT Test Trench

R Refusal

ND Analyte Not Detected

NT Analyte Not Tested

Highlighted cells indicate exceedance of NMOCD Table 1 Closure Criteria

#### **Remediation Activities**

On June 22, 2023, Talon personnel returned to location to remove impacted soils located around suspected historical release area in pasture. Backhoe was used to excavate 3 feet bgs. of contaminated soils and composite samples were taken at this point. The samples were transported with the chain of custody to Cardinal Laboratories, for analysis of Total Chlorides (SM4500Cl-B), Total Petroleum Hydrocarbons (TPH, EPA Method 8015M) and Volatile Organics (BTEX, EPA Method 8021B).

On June 28, 2023, Talon personnel returned to location to remove an additional impacted soils located around C-1, SW-1, and SW-2. Composite samples were taken and were transported with the chain of custody to Cardinal Laboratories, for analysis of Total Chlorides (SM4500Cl-B), Total Petroleum Hydrocarbons (TPH, EPA Method 8015M) and Volatile Organics (BTEX, EPA Method 8021B).

On July 12, 2023, Talon personnel returned to location to remove an additional impacted soils located around SW-1 and returned also on the 28 to collect samples at C-2 and C-3. Composite samples were taken and were transported with the chain of custody to Cardinal Laboratories, for analysis of Total Chlorides (SM4500Cl-B), Total Petroleum Hydrocarbons (TPH, EPA Method 8015M) and Volatile Organics (BTEX, EPA Method 8021B).

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

	Cooper 3 #006								
Sample ID	Sample Date	Depth (BGS)	Benzene mg/kg	BTEX mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Chlorides mg/kg
NMOCD Table 1 Closure Criteria 19.15.29 NMAC			10 mg/kg	50 mg/kg		+ GRO + ned = 100		100 mg/kg	600 mg/kg
C-1	6/22/23	3'	ND	ND	ND	120	125	245	112
C-1	6/28/23	4'	ND	ND	ND	ND	ND	0	224
C-2	6/22/23	3'	ND	ND	ND	75	84	159	192
C-2	7/28/23	4'	ND	ND	ND	ND	ND	0	64
C-3	6/22/23	3'	ND	ND	ND	49	51	100	256
C-3	7/28/23	4'	ND	ND	ND	ND	ND	0	64
	6/22/23		ND	ND	ND	16	21	37	112
SW-1	6/28/23		ND	ND	ND	283	258	541	96
	7/12/23		ND	ND	ND	ND	ND	0	112
SW-2	6/22/23		ND	ND	ND	250	155	405	240
300-2	6/28/23		ND	ND	ND	18.4	24.5	42.9	176
SW-3	6/22/23		ND	ND	ND	27	29	56	240
SW-4	6/22/23		ND	ND	ND	18	24	42	80

**NOTES:** 

Below ground **BGS** 

surface

Milligrams per

mg/kg kilogram

**Total Petroleum TPH** 

Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

MRO Motor oil range organics

S Sample

Confirmation С

Sample

SW Sidewall Sample

TT **Test Trench** 

R Refusal

Analyte Not ND

Detected

Analyte Not

NT Tested **Highlighted cells indicate** exceedance of NMOCD Table 1 **Closure Criteria** 

## **Remedial Action Summary**

- The impacted areas on pasture were excavated to depth of 4 feet bgs. Talon field titrated soil samples for total chlorides to guide the vertical and horizontal extents of the excavation process.
- Pursuant to NMOCD guidance, confirmation soil samples were collected at 200 square foot intervals and analyzed for TPH, BTEX and Total Chlorides to insure all areas had reached NMOCD closure criteria.
- The excavated areas on pasture backfilled with new like material (topsoil), machine compacted, and contoured to match the surrounding location.
- Photographic documentation is provided in Appendix IV.
- Copies of the Final C-141s are presented in Appendix III.

#### Closure

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

Respectfully submitted,

Talon/LPE

Chad Hensley

**Project Manager** 

Ched Howler

Attachments:

Appendix I Site Maps

Appendix II Groundwater Data, Soil Survey, FEMA Flood Map

Appendix III C-141 Form

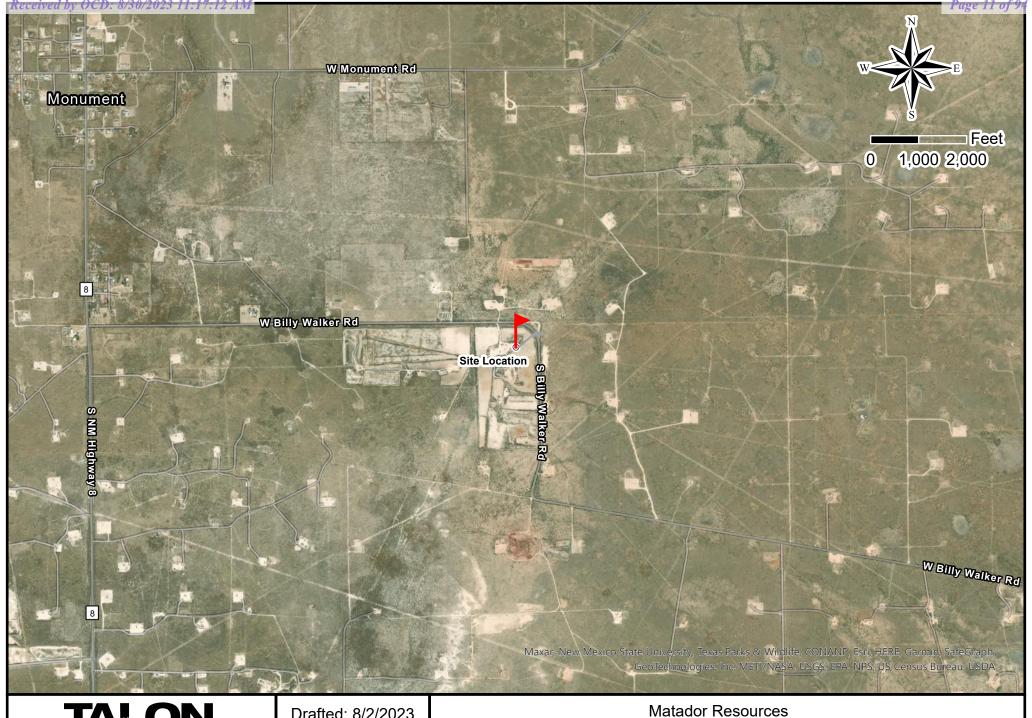
Appendix IV Photographic Documentation

Appendix VLaboratory Report



# Appendix I

Site Maps



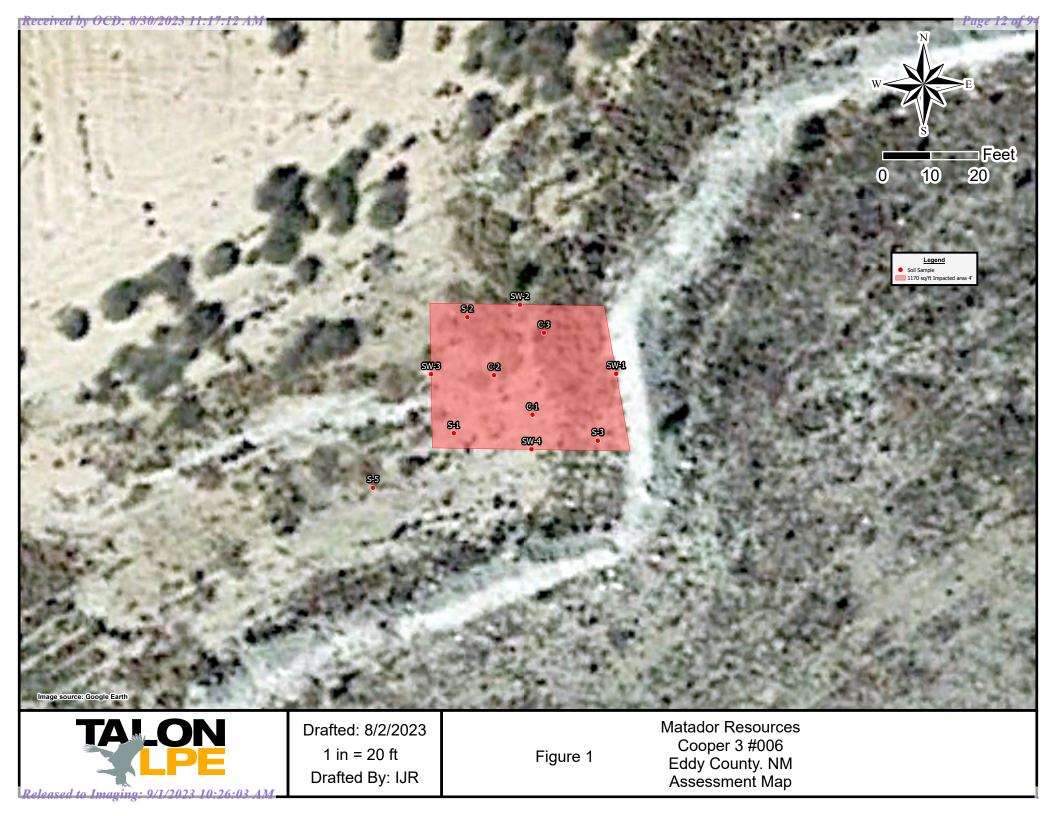


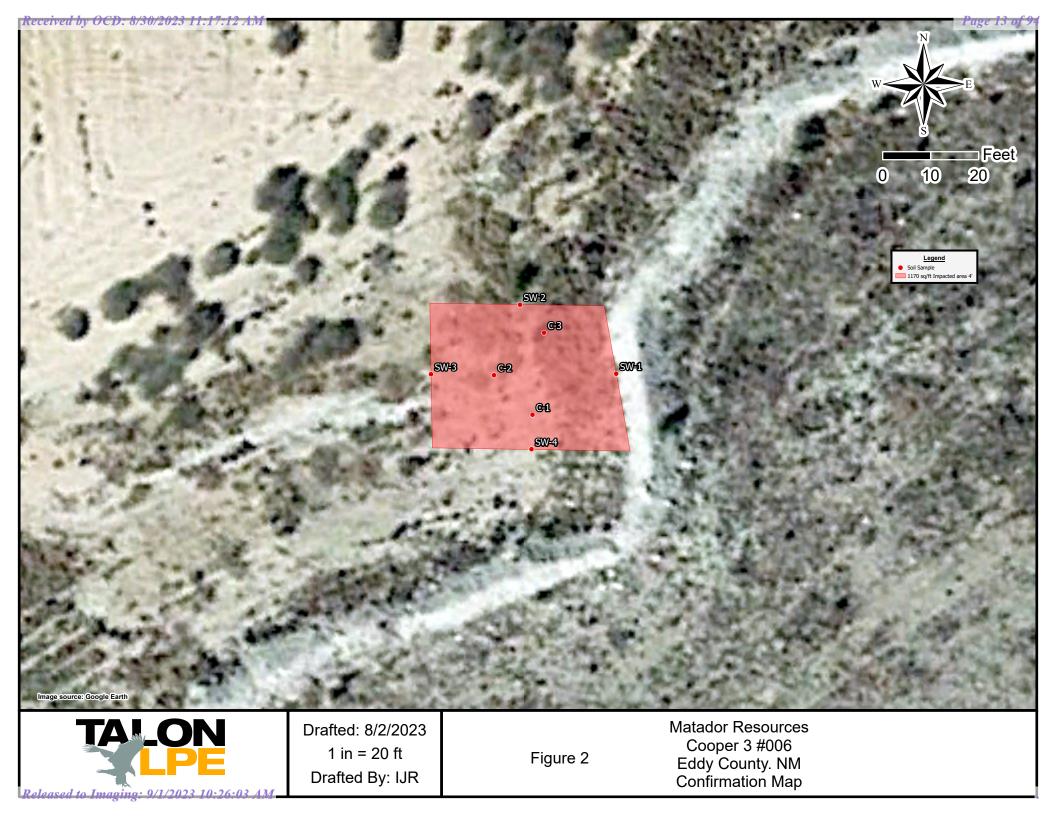
Drafted: 8/2/2023

1 in = 2,000 ft

Drafted By: IJR

Cooper 3 #006 Eddy County. NM **Location Map** 



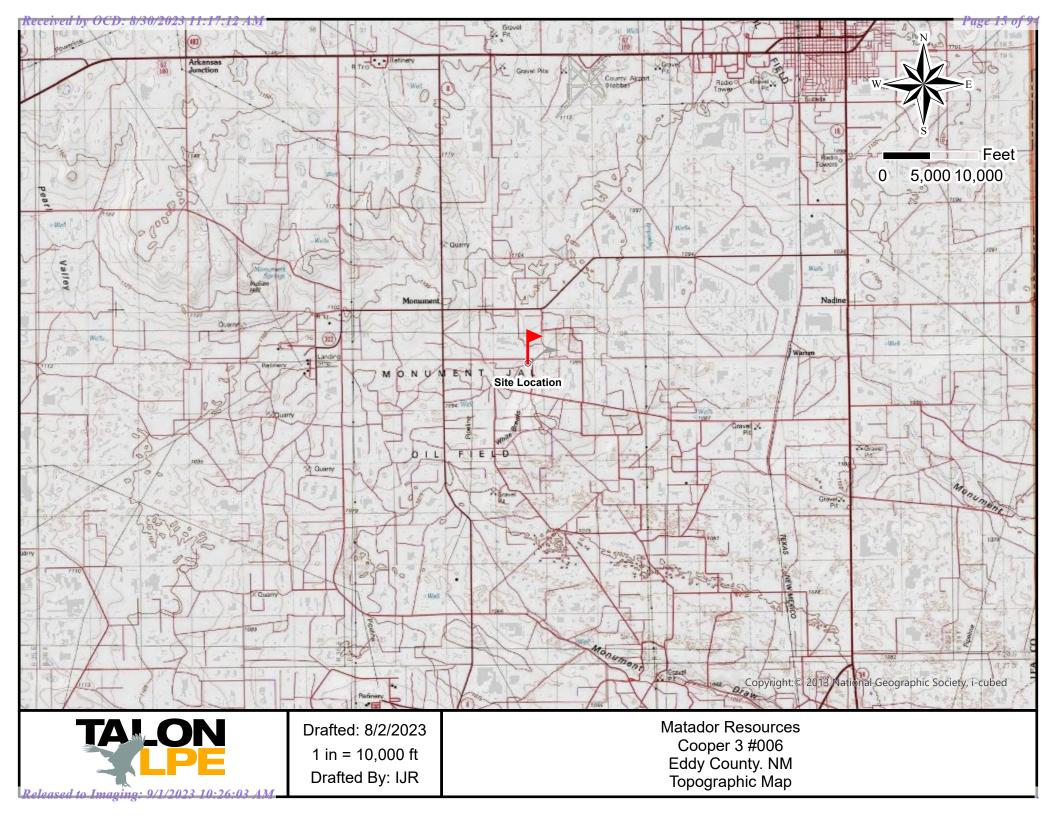




Released to Imaging: 9/1/2023 10:26:03 AM

Drafted By: IJR

Karst Map





# **Appendix II**

Groundwater Data
Soil Survey
FEMA Flood Map



# New Mexico Office of the State Engineer

# **Point of Diversion Summary**

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number** L 01253

Q64 Q16 Q4 Sec Tws Rng 1 3 2 08 20S 37E

662125 3607195\*

**Driller License:** 

**Driller Company:** 

Pipe Discharge Size:

**Driller Name:** 

GENE R BURKE

**Drill Start Date:** 10/08/1936 Log File Date: 12/02/1952 **Drill Finish Date: PCW Rcv Date:** 

10/08/1936 Plug Date: 12/02/1952

Source:

**Estimated Yield:** 

Pump Type: **Casing Size:** 

Depth Well: 7.00

81 feet

Depth Water: 45 feet

Water Bearing Stratifications:

Top Bottom Description

55 Sandstone/Gravel/Conglomerate 65 75 Sandstone/Gravel/Conglomerate

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

1/24/23 9:52 AM

POINT OF DIVERSION SUMMARY

Shallow

<sup>\*</sup>UTM location was derived from PLSS - see Help



**VRCS** 

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

# Custom Soil Resource Report for Lea County, New Mexico



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

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Soil Map	
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MN—Ratliff-Wink fine sandy loams	
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#### Custom Soil Resource Report

#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

#### Special Point Features

ဖ

Blowout

Borrow Pit

Clay Spot

**Closed Depression** 

Gravel Pit

Gravelly Spot

Landfill

Lava Flow Marsh or swamp

Mine or Quarry

Miscellaneous Water Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Sodic Spot

Slide or Slip

Spoil Area Stony Spot



Very Stony Spot



Wet Spot Other

Δ

Special Line Features

#### **Water Features**

Streams and Canals

#### Transportation

---

Rails

Interstate Highways

**US Routes** 

Major Roads

00

Local Roads

#### Background

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

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

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

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

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

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

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

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

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

#### Custom Soil Resource Report

#### Lea County, New Mexico

#### MN—Ratliff-Wink fine sandy loams

#### **Map Unit Setting**

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

Mean annual precipitation: 10 to 15 inches Mean annual air temperature: 60 to 62 degrees F

Frost-free period: 190 to 205 days

Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Ratliff and similar soils: 45 percent Wink and similar soils: 40 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Ratliff**

#### Setting

Landform: Plains

Landform position (three-dimensional): Dip

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Calcareous alluvium and/or calcareous eolian deposits derived

from sedimentary rock

#### **Typical profile**

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

#### Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 50 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

#### Interpretive groups

Land capability classification (irrigated): 4e Land capability classification (nonirrigated): 6c

Hydrologic Soil Group: B

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

#### Custom Soil Resource Report

#### **Description of Wink**

#### Setting

Landform: Plains

Landform position (three-dimensional): Dip

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Calcareous sandy alluvium and/or calcareous sandy eolian

deposits derived from sedimentary rock

#### **Typical profile**

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

#### Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Low (about 4.7 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: R070BD004NM - Sandy

Hydric soil rating: No

#### **Minor Components**

#### Kermit

Percent of map unit: 6 percent

Ecological site: R070BC022NM - Sandhills

Hydric soil rating: No

#### Maljamar

Percent of map unit: 5 percent

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

#### **Palomas**

Percent of map unit: 4 percent

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No



# Appendix III

C-141 Forms

NMOCD Correspondence

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NPAC0734734930
District RP	
Facility ID	
Application ID	

# **Release Notification**

## **Responsible Party**

Responsible Party Matador Resources				OGRID	228937			
Contact Name Clinton Talley					Contact Tel	ephone 337-319	9-8398	
Contact ema	<sup>il</sup> clin	ton.talley@mat	adorresources.c	com	Incident # (	assigned by OCD) NP.	AC0734734930	
Contact mail	ling address	5347 N. 26th	n Street 2nd Flo	or, Arte	esia, NM 88	3210		
			Location	of Re	elease So	urce		
Latitude 32.	.608223			Ī	Congitude =	103.2363205		
Latitude			(NAD 83 in de	ecimal degr	rees to 5 decim	al places)		_
Site Name Co	OOPER 3 #	±006			Site Type	Oil Release		
		11/19/2007			API# (if appl	icable) 30-025-352	 204	
	1	_						
Unit Letter	Section	Township	Range		Count	у		
В	03	20S	37E	Lea				
Surface Owne	er: State	Federal T	ribal Private (	[Name: _			)	
			Nature and	d Volu	ume of R	elease		
		l(s) Released (Select a	ll that apply and attach	h calculation	ons or specific j	ustification for the volu	mes provided below)	
Crude Oi	1	Volume Release	ed (bbls) 7 bbl			Volume Recovere	ed (bbls) 5 bbl	
Produced	Water	Volume Release	ed (bbls)			Volume Recovered (bbls)		
			tion of dissolved o	chloride	in the	Yes No		
Condensa	ate	produced water Volume Release				Volume Recovere	ed (bbls)	
☐ Natural C		Volume Release				Volume Recovere		
Other (describe) Volume/Weight Released (provide units)			le units)	` ′				
other (de	osciloc)	v Grame, vv eigne	recoused (provid	ic umis)		v orame, vv eight i	tecovered (provide units)	
Cause of Rel	lease	ı						
Corros	sion							
001103	51011							

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Incident ID	NPAC0734734930
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the respon	sible party consider this a major release?
☐ Yes ☑ No		
If YES, was immediate no	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
	Initial Ro	esponse
The responsible	party must undertake the following actions immediatel	unless they could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.	
☑ The impacted area ha	s been secured to protect human health and	the environment.
Released materials ha	ive been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and	l managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain v	vhy:
Per 19 15 29 8 B (4) NM	AC the responsible party may commence r	emediation immediately after discovery of a release. If remediation
has begun, please attach	a narrative of actions to date. If remedial	efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.
		pest of my knowledge and understand that pursuant to OCD rules and
public health or the environr	nent. The acceptance of a C-141 report by the C	ications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have
		at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name: Clinton	Talley	Title: EHS
Signature: Clina	Talley  Tallsy  Dimatadorresources com	Date: _8/30/2023
email: clinton.talley@	matadorresources.com	Telephone: 337-319-8398
OCD Only		
Received by:		Date:

	Page 28 of	94
Incident ID	NPAC0734734930	
District RP		
Facility ID		
Application ID		

## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	45 (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 <b>not</b> 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 ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	rtical extents of soil
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 wel Field data	ls.
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	
<ul> <li>☑ Boring or excavation logs</li> <li>☑ Photographs including date and GIS information</li> </ul>	
✓ Fhotographs heridding date and O1S 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.

Received by OCD: 8/30/2023 11:17:12 AM
State of New Mexico
Page 4
Oil Conservation Division

Incident ID NPAC0734734930
District RP
Facility ID
Application ID

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Printed Name: Clinton Talley	Title: EHS	
Signature: Clint Talley	Date: _8/30/2023	
Signature: Clint Talley email: clinton.talley@matadorresources.com	Date: _8/30/2023 Telephone: _337-319-8398	
OCD Only		
Received by:	Date:	

Page 30 of 94

Incident ID	NPAC0734734930
District RP	
Facility ID	
Application ID	

# Closure

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

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

✓ A scaled site and sampling diagram as described in 19.15.29.11 NMAC		
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)		
Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)		
✓ Description of remediation activities		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.		
Printed Name: Clinton Talley	Title: EHS	
Signature:Clint Tallsy email:clinton.talley@matadorresources.com	Date:8/30/2023	
email:clinton.talley@matadorresources.com	Telephone:337-319-8398	
OCD Only		
Received by:	Date:	
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.		
Closure Approved by: Ashley Maxwell	Date: 09/01/2023	
Closure Approved by: Ashley Maxwell  Printed Name: Ashley Maxwell	Title: Environmental Specialist	

From: Wells, Shelly, EMNRD
To: Chad Hensley

Cc: Bratcher, Michael, EMNRD; Harimon, Jocelyn, EMNRD

Subject: RE: [EXTERNAL] Confirmation Sampling Event

Date: Wednesday, August 9, 2023 4:21:59 PM

Attachments: <u>image001.png</u>

image002.png

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

Good afternoon Chad,

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

Thank you,

Shelly

Shelly Wells \* Environmental Specialist-Advanced

Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov

From: Chad Hensley <chensley@talonlpe.com>
Sent: Wednesday, August 9, 2023 3:28 PM

To: Enviro, OCD, EMNRD < OCD. Enviro@emnrd.nm.gov>

Cc: Nathaniel Rose <nrose@talonlpe.com>

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

Subject: [EXTERNAL] Confirmation Sampling Event

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

To whom it may concern,

Talon on behalf of Matador is conducting a sampling event for: Cooper 3 #6 nPAC0734734930

8/14/2023 at 8am

**Chad Hensley** 

**Environmental Project Manager** 

Office: 575.746.8768 x708 Direct: 575.616.4023 Cell: 575.246.0032 Fax: 575.746.8905 Emergency: 866.742.0742 Web: www.talonlpe.com



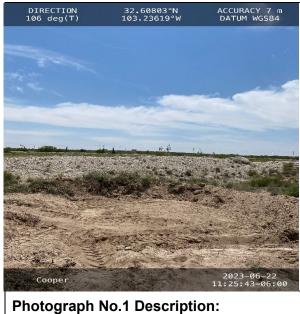
At Talon/LPE, we are quality in all things, including communication. Have a question? Need a quote? Send an email to <u>clientrelations@talonlpe.com</u>.



# Appendix IV

Photographic Documentation





Remediation Activities



**Photograph No.2 Description:** 

Remediation Activities



**Photograph No.3 Description:** 

Remediation Activities



**Photograph No.4 Description:** 

Remediation Activities



# Appendix V

**Laboratory Reports** 



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

June 27, 2023

**CHAD HENSLEY** 

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COOPER

Enclosed are the results of analyses for samples received by the laboratory on 06/22/23 12:55.

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

Wite Sough

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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



### Analytical Results For:

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

Received: 06/22/2023 Reported: 06/27/2023

Project Name: COOPER
Project Number: 702520.051.01
Project Location: EDDY COUNTY

Sampling Date: 06/22/2023

Sampling Type: Soil

Sampling Condition: \*\* (See Notes)
Sample Received By: Tamara Oldaker

### Sample ID: SW - 1 1.5' (H233243-01)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	1.93	96.7	2.00	2.89	
Toluene*	<0.050	0.050	06/23/2023	ND	1.96	98.0	2.00	3.40	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.01	100	2.00	4.32	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	5.97	99.5	6.00	4.58	
Total BTEX	<0.300	0.300	06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 71.5-13	4						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/23/2023	ND	432	108	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2023	ND	207	104	200	22.2	
DRO >C10-C28*	16.1	10.0	06/23/2023	ND	202	101	200	17.2	
EXT DRO >C28-C36	20.6	10.0	06/23/2023	ND					
Surrogate: 1-Chlorooctane	96.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	105	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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Me Sough



### Analytical Results For:

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

Received: 06/22/2023 Reported: 06/27/2023

Project Name: COOPER
Project Number: 702520.051.01
Project Location: EDDY COUNTY

Sampling Date: 06/22/2023

Sampling Type: Soil

Sampling Condition: \*\* (See Notes)
Sample Received By: Tamara Oldaker

### Sample ID: SW - 2 1.5' (H233243-02)

BTEX 8021B	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	1.93	96.7	2.00	2.89	
Toluene*	<0.050	0.050	06/23/2023	ND	1.96	98.0	2.00	3.40	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.01	100	2.00	4.32	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	5.97	99.5	6.00	4.58	
Total BTEX	<0.300	0.300	06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	06/23/2023	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2023	ND	207	104	200	22.2	
DRO >C10-C28*	250	10.0	06/23/2023	ND	202	101	200	17.2	
EXT DRO >C28-C36	155	10.0	06/23/2023	ND					
Surrogate: 1-Chlorooctane	101	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	128	% 49.1-14	8						

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### Analytical Results For:

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

Received: 06/22/2023

 Reported:
 06/27/2023

 Project Name:
 COOPER

 Project Number:
 702520.051.01

Project Location: EDDY COUNTY

Sampling Date: 06/22/2023

Sampling Type: Soil

Sampling Condition: \*\* (See Notes)
Sample Received By: Tamara Oldaker

### Sample ID: SW - 3 1.5' (H233243-03)

BTEX 8021B	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	1.93	96.7	2.00	2.89	
Toluene*	<0.050	0.050	06/23/2023	ND	1.96	98.0	2.00	3.40	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.01	100	2.00	4.32	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	5.97	99.5	6.00	4.58	
Total BTEX	<0.300	0.300	06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	06/23/2023	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2023	ND	171	85.3	200	22.8	
DRO >C10-C28*	27.4	10.0	06/23/2023	ND	168	84.2	200	17.8	
EXT DRO >C28-C36	28.6	10.0	06/23/2023	ND					
Surrogate: 1-Chlorooctane	98.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	107	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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### Analytical Results For:

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

Received: 06/22/2023 Sampling Date: 06/22/2023 Reported: 06/27/2023 Sampling Type: Soil

Project Name: COOPER Sampling Condition: \*\* (See Notes) Sample Received By: Tamara Oldaker Project Number: 702520.051.01

**EDDY COUNTY** Project Location:

### Sample ID: SW - 4 1.5' (H233243-04)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	1.93	96.7	2.00	2.89	
Toluene*	<0.050	0.050	06/23/2023	ND	1.96	98.0	2.00	3.40	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	2.01	100	2.00	4.32	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	5.97	99.5	6.00	4.58	
Total BTEX	<0.300	0.300	06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/23/2023	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2023	ND	171	85.3	200	22.8	
DRO >C10-C28*	17.6	10.0	06/23/2023	ND	168	84.2	200	17.8	
EXT DRO >C28-C36	24.3	10.0	06/23/2023	ND					
Surrogate: 1-Chlorooctane	101	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	109	% 49.1-14	18						

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with Sigh



### Analytical Results For:

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

Received: 06/22/2023 Sampling Date: 06/22/2023 Reported: 06/27/2023 Sampling Type: Soil

Project Name: COOPER Sampling Condition: \*\* (See Notes)
Project Number: 702520.051.01 Sample Received By: Tamara Oldaker

Project Location: EDDY COUNTY

### Sample ID: C - 1 3' (H233243-05)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2023	ND	2.02	101	2.00	7.76	
Toluene*	<0.050	0.050	06/23/2023	ND	1.97	98.6	2.00	7.92	
Ethylbenzene*	<0.050	0.050	06/23/2023	ND	1.96	97.8	2.00	7.74	
Total Xylenes*	<0.150	0.150	06/23/2023	ND	5.78	96.4	6.00	7.98	
Total BTEX	<0.300	0.300	06/23/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/23/2023	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2023	ND	171	85.3	200	22.8	
DRO >C10-C28*	120	10.0	06/23/2023	ND	168	84.2	200	17.8	
EXT DRO >C28-C36	125	10.0	06/23/2023	ND					
Surrogate: 1-Chlorooctane	93.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	106	% 49.1-14	18						

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Mile Sough



### Analytical Results For:

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

Received: 06/22/2023

Reported: 06/27/2023
Project Name: COOPER
Project Number: 702520.051.01

Project Location: EDDY COUNTY

Sampling Date: 06/22/2023

Sampling Type: Soil

Sampling Condition: \*\* (See Notes)
Sample Received By: Tamara Oldaker

### Sample ID: C - 2 3' (H233243-06)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/24/2023	ND	2.02	101	2.00	7.76	
Toluene*	<0.050	0.050	06/24/2023	ND	1.97	98.6	2.00	7.92	
Ethylbenzene*	<0.050	0.050	06/24/2023	ND	1.96	97.8	2.00	7.74	
Total Xylenes*	<0.150	0.150	06/24/2023	ND	5.78	96.4	6.00	7.98	
Total BTEX	<0.300	0.300	06/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	06/23/2023	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/24/2023	ND	171	85.3	200	22.8	
DRO >C10-C28*	74.7	10.0	06/24/2023	ND	168	84.2	200	17.8	
EXT DRO >C28-C36	83.5	10.0	06/24/2023	ND					
Surrogate: 1-Chlorooctane	102	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	114	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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Mile Sough



### Analytical Results For:

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

Received: 06/22/2023 Sampling Date: 06/22/2023 Reported: 06/27/2023 Sampling Type: Soil

Project Name: COOPER Sampling Condition: \*\* (See Notes)
Project Number: 702520.051.01 Sample Received By: Tamara Oldaker

Analyzed By: MC

Project Location: EDDY COUNTY

ma/ka

### Sample ID: C - 3 3' (H233243-07)

RTFY 8021R

B1EX 8021B	mg	/ <b>kg</b>	Anaiyze	а ву: м5					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/24/2023	ND	2.02	101	2.00	7.76	
Toluene*	<0.050	0.050	06/24/2023	ND	1.97	98.6	2.00	7.92	
Ethylbenzene*	<0.050	0.050	06/24/2023	ND	1.96	97.8	2.00	7.74	
Total Xylenes*	<0.150	0.150	06/24/2023	ND	5.78	96.4	6.00	7.98	
Total BTEX	<0.300	0.300	06/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	06/23/2023	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/24/2023	ND	171	85.3	200	22.8	
DRO >C10-C28*	49.1	10.0	06/24/2023	ND	168	84.2	200	17.8	
EXT DRO >C28-C36	51.4	10.0	06/24/2023	ND					
Surrogate: 1-Chlorooctane	83.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	89.9	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Me Sough



### **Notes and Definitions**

QR-04 The RPD for the BS/BSD was outside of historical limits.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

ecovery.

BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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Mile Sough

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



	accept verbal changes. Please email chan	+	Sampler - UPS - Bus - Other:
Turnaround Time: Standard Cool Intact Observed Temp. °C  Rush Cool Intact Observed Temp. °C  Thermometer ID #113  Thermometer ID #113  No Corrected Temp. °C  No Corrected Temp. °C	Sample Condition CHECKED BY: Cool Intact (Initials)  yes Yes	Observed Temp. °C 32,3	Delivered By: (Circle One)
		Time:	No.
REMARKS:	Received By:	200	Relinquished By:
re emailed. Please prov	Received By:	Date: 7-838 Rec	Relinquished By:
Its subsidiaries, the subsidiaries of the subs	PLEASE NOTE: Liability and Liamages, curiums a security and control by Cardinal within and received by Cardinal within a use of the control of the cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within a use of profits incruded by client, its subsidiaries, analyses. All claims including whose for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within a subsidiaries, sankes. All claims including within a control of the cause of profits incruded by claim, it is subsidiaries, sentice. In no event shall Cardinal be liable for incidental or consequential damages, including within a liable, the cause of the cause	Illians inclumity with the deemed verified any other cause whatsoever shall be deemed verified any other cause whatsoever shall be deemed verified and any other cause whatsoever shall be deemed verified to consequential damages, including without for consequential of control of the cause of the control of the cause	PLEASE NOTE: Liability and Damages. Card analyses. All claims including those for neglig analyses. All claims including those for neglig service. In no event shall Cardinal be liable to
the client for the models on of the artificiable	The library and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount peld by the client for the	and claim saylusive remedy for any claim.	
7.70	+	3 3	7 2
11:76		2	3 (2)
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7.02			SU
0:26		-0 1.51	7
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TIME	ROUN PASTE DIL LUDG THER CID/B OTHER	)RAB	
51	E ASE:	Sample I.D.	lah LD.
CH C)	ER		FOR LAB USE ONLY
	MATRIX PRESERV. SAMPLING	No.Z.	Sampler Name:
	Phone #:	y county	Project Location:
	State: Zip:	4	Project Name: Coop
	City:	5 . 0   Project Owner: Ma fado	Project #: 762520 05 00
	Address:		Phone #: 5-75-706-8768
	\$8201 Attn:	State: N/M Zip:	CO.
	Company: Matador	Heapten	Project Mariager. Cha
	P.O. #:	1 Moron 1	Company Manager:
ANALTSIS REGOES	BILL TO	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-
TSELLICED BEOLIEST		575) 393-2326 FAX (575) 393-2476	(675) 393

Page 10 of 10



July 03, 2023

**CHAD HENSLEY** 

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COOPER

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

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

Celey D. Keine

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



### Analytical Results For:

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

Received: 06/28/2023 Sampling Date: 06/28/2023 Reported: 07/03/2023 Sampling Type: Soil

Project Name: COOPER Sampling Condition: \*\* (See Notes)
Project Number: 702520.051.01 Sample Received By: Tamara Oldaker

Applymed By MC

Project Location: MATADOR - LEA COUNTY

### Sample ID: SW - 1 1.5' (H233345-01)

DTEV 0021D

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/29/2023	ND	2.25	112	2.00	3.93	
Toluene*	<0.050	0.050	06/29/2023	ND	2.26	113	2.00	4.52	
Ethylbenzene*	<0.050	0.050	06/29/2023	ND	2.12	106	2.00	1.67	
Total Xylenes*	<0.150	0.150	06/29/2023	ND	6.55	109	6.00	1.06	
Total BTEX	<0.300	0.300	06/29/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/29/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/29/2023	ND	200	99.9	200	0.670	
DRO >C10-C28*	283	10.0	06/29/2023	ND	197	98.5	200	7.16	
EXT DRO >C28-C36	258	10.0	06/29/2023	ND					
Surrogate: 1-Chlorooctane	137	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	163	% 49.1-14	8						

### Cardinal Laboratories \*=Accredited Analyte

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Celeg D. Kreene



### Analytical Results For:

TALON LPE CHAD HENSLEY 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To: (575) 745-8905

Received: 06/28/2023 Sampling Date: 06/28/2023

Reported: 07/03/2023 Sampling Type: Soil

Project Name: COOPER Sampling Condition: \*\* (See Notes)

Project Number: 702520.051.01 Sample Received By: Tamara Oldaker

Analyzed By: MC

Project Location: MATADOR - LEA COUNTY

### Sample ID: SW - 2 1.5' (H233345-02)

RTFY 8021R

BIEX 8021B	mg	/кд	Anaiyze	а ву: м5					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/29/2023	ND	2.25	112	2.00	3.93	
Toluene*	<0.050	0.050	06/29/2023	ND	2.26	113	2.00	4.52	
Ethylbenzene*	<0.050	0.050	06/29/2023	ND	2.12	106	2.00	1.67	
Total Xylenes*	<0.150	0.150	06/29/2023	ND	6.55	109	6.00	1.06	
Total BTEX	<0.300	0.300	06/29/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	06/29/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/29/2023	ND	200	99.9	200	0.670	
DRO >C10-C28*	18.4	10.0	06/29/2023	ND	197	98.5	200	7.16	
EXT DRO >C28-C36	24.5	10.0	06/29/2023	ND					
Surrogate: 1-Chlorooctane	132	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	139	% 49.1-14	8						

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Celeg & Frence



### Analytical Results For:

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

Received: 06/28/2023 Sampling Date: 06/28/2023 Reported: 07/03/2023 Sampling Type: Soil

Project Name: COOPER Sampling Condition: \*\* (See Notes) Sample Received By: Project Number: 702520.051.01 Tamara Oldaker

MATADOR - LEA COUNTY Project Location:

### Sample ID: C - 1 4' (H233345-03)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/29/2023	ND	1.99	99.3	2.00	2.17	
Toluene*	<0.050	0.050	06/29/2023	ND	1.95	97.7	2.00	2.00	
Ethylbenzene*	<0.050	0.050	06/29/2023	ND	1.91	95.4	2.00	1.47	
Total Xylenes*	<0.150	0.150	06/29/2023	ND	5.80	96.6	6.00	1.52	
Total BTEX	<0.300	0.300	06/29/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 71.5-13	4						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	06/29/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/29/2023	ND	200	99.9	200	0.670	
DRO >C10-C28*	<10.0	10.0	06/29/2023	ND	197	98.5	200	7.16	
EXT DRO >C28-C36	<10.0	10.0	06/29/2023	ND					
Surrogate: 1-Chlorooctane	128 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	134 9	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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Celeg D. Freene



### **Notes and Definitions**

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

ecovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	L	0/0) 393-2326 FAX (5/5) 393-24/6				9	
Company Name:	Talanl	Ra		BILL TO		ANALYSIS REC	REQUEST
Project Manager:	Cha	Suy	7	P.O. #:			
Address: 4/6	408.W Texas	Auc	0	Company: Ma fact	3		
City: Artesia	×	State: NMZip: 88210					
Phone #: 575	15-746-8768	P Fax #:	A	Address:			
Project #: 702520.051.0	20.051.01	Project Owner:	Matador C	City:			
Project Name: (	Cooper			State: Zip:			
Project Location:	Ita	County	, D	Phone #:			
Sampler Name:		0	77	Fax #:			
FOR LAB USE ONLY		P.	MATRIX	ESERV.	SAMPLING	7	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OME	GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:	ACID/BASE: ICE / COOL OTHER :	CL BTEX TPH		
)	Sw-1 1	_	×	× 1	10:20 X X X		
ع	SU-2 1.	51 61					-
w	6-1-4	01	<b>&gt;</b>	7 7	12:25 1 1		
PLEASE NOTE: Liability and I analyses. All claims including and I are the I food	Damages. Cardinal's liability an	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	sing whether based in contract or to	t, shall be limited to the amount paid	by the client for the completion of the applicable		
Relinquished By:	On other telegraph and belief	Date: Received By: Time:  An Results	Received By:	and upon any of the above s, and real	sons of otherwise.  Verbal Result: □ Yes □ No □ Add'I Phone #:  All Results are emailed. Please provide Email address:	No Add'I Phone #: provide Email address:	
Kellinduisned by:		Time:	Received By:	· ·	REMARKS:		
Delivered By: (Circle One)	de One)	Observed Temp. °C 376	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard		Bacteria (only) Sample Condition
Sampler - UPS - Bus - Other:	us - Other:	Corrected Temp. °C 37.0		`	Thermometer ID #113 Correction Factor -0.6°C	[	Corrected Temp. °C



July 17, 2023

**CHAD HENSLEY** 

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COOPER

Enclosed are the results of analyses for samples received by the laboratory on 07/12/23 13:24.

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

Celey D. Keine

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



### Analytical Results For:

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

Received: 07/12/2023 Sampling Date: 07/12/2023

Reported: 07/17/2023 Sampling Type: Soil Project Name: COOPER Sampling Condition:

\*\* (See Notes) Project Number: 702520.051.01 Sample Received By: Tamara Oldaker

Project Location: MATADOR - LEA COUNTY

### Sample ID: SW - 1 2' (H233561-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/14/2023	ND	1.99	99.5	2.00	1.53	
Toluene*	<0.050	0.050	07/14/2023	ND	1.99	99.3	2.00	1.32	
Ethylbenzene*	<0.050	0.050	07/14/2023	ND	1.99	99.4	2.00	1.23	
Total Xylenes*	<0.150	0.150	07/14/2023	ND	5.87	97.8	6.00	1.40	
Total BTEX	<0.300	0.300	07/14/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	6 71.5-13	4						
Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/13/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/13/2023	ND	212	106	200	10.7	
DRO >C10-C28*	<10.0	10.0	07/13/2023	ND	226	113	200	4.78	
EXT DRO >C28-C36	<10.0	10.0	07/13/2023	ND					
Surrogate: 1-Chlorooctane	70.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	79.4	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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Celeg D. Freene



### **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keine

## CHAIN-OF-CUSTODY AND ANAL SIS REQUEST



(3/5) 393-2320	575) 393-2326 FAX (5/5) 393-24/6			
Company Name:   a lon	767	BILL TO	ANALYSIS REQUEST	1
Project Manager: C. Hens	ensley	P.O. #:		
Address: 408 W. Texa	save	Company:		
city: Artesia	State: Nm Zip: 88210	Attn:		
e#:	8 Fax #:	Address:		
Project #: 702 S20.05/10	[1.0] Project Owner: Ma fallor	City:		
Project Name: Cooper		State: Zip:		
on: Lea	noun of	Phone #:		
Sampler Name: 1. Rosa	X	Fax #:		
		PRESERV. SAME	SAMPLING	
Lab I.D. Sample I.D.	(G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER:	Brex CL TPH	
. Sω-1	-	X 7223	/20 X X X	
PLEASE NOTE: Liability and Damages. Cardinal's liability analyses. All claims including those for negligence and any service. In no event shall Cardinal be liable for incidental or service. In no event shall Cardinal be	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 whole limitation, business interruptions, loss of use, or loss of profits incurred by client, its substituties, 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 substituties are considered by the consequence of the con	ct or tort, shall be limited to the amount paid by the client for the dreceived by Cardinal within 30 days after completion of the loss of toes, or loss of profits incurred by client, its subsidiaries is based unan vary of the above stated reasons or otherwises is based unan vary of the above stated reasons or otherwises	I by the client for the roompletion of the applicable lieut, its substituties, lieut, its substituties, lieut, its substituties, lieut, its substituties.	2
Relinquished &	Date: 7-12-23 Received By:	2/1/1 4	Verbal Result: ☐ Yes ☐ No Add'I Phone #: All Results are emailed. Please provide Email address:	
Relinquished By:	Time: Received By:			89.
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 326  Cool Intact Cool Cool Intact Cool Intact Cool Intact Cool Intact Cool Intact No In No	tion CHECKED BY: (Initials)	Turnaround Time: Standard Standard Bacteria (only) Sample Condition  Rush Cool Intact Observed Temp. °C  Thermometer ID ±113- £/4-6, 7/12/23 Nc No Corrected Temp. °C	



August 07, 2023

**CHAD HENSLEY** 

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

**RE: MATADOR COOPER 3** 

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

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

Celey D. Keine

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



### Analytical Results For:

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

Received: 07/28/2023 Sampling Date: 07/27/2023

Reported: 08/07/2023 Sampling Type: Soil

Project Name: MATADOR COOPER 3 Sampling Condition: Cool & Intact Project Number: 702520.051.01 Sample Received By: Jodi Henson

Project Location: MATADOR - LEA COUNTY

### Sample ID: C - 3 4' (H233996-01)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/05/2023	ND	1.97	98.7	2.00	5.01	
Toluene*	<0.050	0.050	08/05/2023	ND	1.87	93.7	2.00	7.48	
Ethylbenzene*	<0.050	0.050	08/05/2023	ND	1.86	93.0	2.00	8.14	
Total Xylenes*	<0.150	0.150	08/05/2023	ND	5.59	93.2	6.00	8.15	
Total BTEX	<0.300	0.300	08/05/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 71.5-13	4						
Chloride, SM4500CI-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	08/04/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/03/2023	ND	161	80.3	200	5.77	
DRO >C10-C28*	<10.0	10.0	08/03/2023	ND	183	91.7	200	3.46	
EXT DRO >C28-C36	<10.0	10.0	08/03/2023	ND					
Surrogate: 1-Chlorooctane	86.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	101	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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Celeg D. Freene



### Analytical Results For:

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

Received: 07/28/2023 Sampling Date: 07/27/2023

Reported: 08/07/2023 Sampling Type: Soil

Project Name: MATADOR COOPER 3 Sampling Condition: Cool & Intact
Project Number: 702520.051.01 Sample Received By: Jodi Henson

Analyzed By: MS

Project Location: MATADOR - LEA COUNTY

mg/kg

### Sample ID: C - 2 4' (H233996-02)

BTEX 8021B

	<u> </u>								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2023	ND	2.03	101	2.00	3.20	
Toluene*	<0.050	0.050	08/04/2023	ND	1.97	98.3	2.00	1.65	
Ethylbenzene*	<0.050	0.050	08/04/2023	ND	2.00	100	2.00	3.00	
Total Xylenes*	<0.150	0.150	08/04/2023	ND	5.97	99.6	6.00	3.19	
Total BTEX	<0.300	0.300	08/04/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 71.5-13	4						
Chloride, SM4500CI-B	mg/kg		Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/04/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/03/2023	ND	161	80.3	200	5.77	
DRO >C10-C28*	<10.0	10.0	08/03/2023	ND	183	91.7	200	3.46	
EXT DRO >C28-C36	<10.0	10.0	08/03/2023	ND					
Surrogate: 1-Chlorooctane	86.8	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.3	% 49.1-14	8						

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keine



### **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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Celeg D. Freene

Relinquished By:

Relinquished By

Time:

Received By:

Phone Result: Fax Result: REMARKS:

Yes

□ No

Add'l Phone #: Add'l Fax #:



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

(0/0) 353-2326 FAX (0/0) 353-24/6	6		
Company Name:Talon LPE		BILL TO	ANALYSIS REQUEST
Project Manager: C. Hensley		P.O. #:	
Address: 408 W. Texas Ave		Company:	
city: Artesia state: NM	zip: 88210	Attn:	
#: 575.746.8768 F		Address:	
1	Project Owner: Matador	City:	
Project Name: MatadorCooper3		State: Zip:	
Project Location: Lea County		Phone #:	
Sampler Name: N. Rose		Fax #:	
FOR LAB USE ONLY	MATRIX	PRESERV. SAMPLING	
Lab I.D. Sample I.D.	(G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER: DATE	CL BTEX TPH
( C-3 4'	C 1	07/27/ 1120	< < < < < < < < < < < < < < < < < < <
C-2 4'	c 1	1128	
•			
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Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

**Environment Testing** 

## **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Kayla Taylor Talon/LPE 408 W. Texas St. Artesia, New Mexico 88210 Generated 1/31/2023 1:00:48 PM Revision 1

## **JOB DESCRIPTION**

COOPER 3 SDG NUMBER 702520.051.01

## **JOB NUMBER**

890-3857-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

## **Eurofins Carlsbad**

### **Job Notes**

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

## Authorization

Generated 1/31/2023 1:00:48 PM Revision 1

Authorized for release by Jessica Kramer, Project Manager <u>Jessica.Kramer@et.eurofinsus.com</u> (432)704-5440 1

Page 2 of 33

Client: Talon/LPE
Project/Site: COOPER 3

Laboratory Job ID: 890-3857-1
SDG: 702520.051.01

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## **Definitions/Glossary**

Client: Talon/LPE Job ID: 890-3857-1 Project/Site: COOPER 3 SDG: 702520.051.01

### **Qualifiers**

<b>GC VOA</b>	
---------------	--

Qualifier **Qualifier Description** J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

S1-Surrogate recovery exceeds control limits, low biased. U Indicates the analyte was analyzed for but not detected.

MS and/or MSD recovery exceeds control limits.

Indicates the analyte was analyzed for but not detected.

**Qualifier Description** 

### **GC Semi VOA**

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.
HPLC/IC	

### Glossary

Qualifier

U

MDC

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample DL, RA, RE, IN DLC Decision Level Concentration (Radiochemistry) **EDL** Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE) MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

Minimum Detectable Concentration (Radiochemistry)

NEG Negative / Absent POS Positive / Present

**Practical Quantitation Limit PQL** 

**PRES** Presumptive QC **Quality Control** 

**RER** Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points **RPD** 

**TEF** Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

### **Case Narrative**

 Client: Talon/LPE
 Job ID: 890-3857-1

 Project/Site: COOPER 3
 SDG: 702520.051.01

Job ID: 890-3857-1

**Laboratory: Eurofins Carlsbad** 

Narrative

**Job Narrative** 890-3857-1

### **REVISION**

The report being provided is a revision of the original report sent on 1/30/2023. The report (revision 1) is being revised due to Pr AJ, MS/MSD missin on final report.

Report revision history

### Receipt

The samples were received on 1/13/2023 2:47 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

### **Receipt Exceptions**

The following were received and analyzed from an unpreserved bulk soil jar: S-1 (890-3857-1), S-1 (890-3857-2), S-1 (890-3857-3), S-2 (890-3857-4), S-3 (890-3857-5), S-3 (890-3857-6), S-3 (890-3857-7), S-4 (890-3857-8) and S-5 (890-3857-9).

### **GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: S-5 (890-3857-9). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

### GC Semi VOA

Method 8015MOD\_NM: The laboratory control sample duplicate (LCSD) for preparation batch 880-44231 and analytical batch 880-44896 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28). These analytes were biased high in the LCSD but were acceptable in the corresponding LCS; therefore, the data have been reported.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-44231/2-A), (LCSD 880-44231/3-A) and (MB 880-44231/1-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (890-3848-A-1-C MS) and (890-3848-A-1-D MSD). Evidence of matrix interferences is not obvious.

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

### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-44197 and analytical batch 880-44281 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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**Matrix: Solid** 

Lab Sample ID: 890-3857-1

 Client: Talon/LPE
 Job ID: 890-3857-1

 Project/Site: COOPER 3
 SDG: 702520.051.01

**Client Sample ID: S-1** 

Date Collected: 01/10/23 13:30 Date Received: 01/13/23 14:47

Sample Depth: 0 - 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		01/19/23 09:48	01/19/23 12:33	1
Toluene	0.000458	J	0.00199	0.000454	mg/Kg		01/19/23 09:48	01/19/23 12:33	1
Ethylbenzene	< 0.000563	U	0.00199	0.000563	mg/Kg		01/19/23 09:48	01/19/23 12:33	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		01/19/23 09:48	01/19/23 12:33	1
o-Xylene	0.000367	J	0.00199	0.000343	mg/Kg		01/19/23 09:48	01/19/23 12:33	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		01/19/23 09:48	01/19/23 12:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				01/19/23 09:48	01/19/23 12:33	1
1 4-Difluorobenzene (Surr)	11.3		70 - 130				01/19/23 09:48	01/19/23 12:33	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			01/19/23 16:54	1

Method: 544846 8015 NM - Die:	sei Range Organics (i	DRO) (GC)						
Analyte	Result Qualifier	RL	MDL (	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	199	50.0	15.0	mg/Kg			01/30/23 10:22	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.5	J	50.0	15.0	mg/Kg		01/18/23 10:15	01/27/23 19:51	1
Diesel Range Organics (Over C10-C28)	173	*+ *1	50.0	15.0	mg/Kg		01/18/23 10:15	01/27/23 19:51	1
Oll Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		01/18/23 10:15	01/27/23 19:51	1

Surrogate	%Recovery C	Qualifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85	70 - 130	01/18/23 10:15	01/27/23 19:51	1
o-Terphenyl	82	70 - 130	01/18/23 10:15	01/27/23 19:51	1
_					

ı	wiethod: EPA 300.0 - Anions, ic	on Chromai	ograpny - a	Soluble						
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	13.3		5.02	0.397	mg/Kg			01/18/23 22:00	1

Client Sample ID: S-1

Date Collected: 01/10/23 13:35

Lab Sample ID: 890-3857-2

Matrix: Solid

Date Received: 01/13/23 14:47

Sample Depth: 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		01/19/23 09:48	01/19/23 12:53	1
Toluene	< 0.000453	U	0.00199	0.000453	mg/Kg		01/19/23 09:48	01/19/23 12:53	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		01/19/23 09:48	01/19/23 12:53	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		01/19/23 09:48	01/19/23 12:53	1
o-Xylene	< 0.000342	U	0.00199	0.000342	mg/Kg		01/19/23 09:48	01/19/23 12:53	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		01/19/23 09:48	01/19/23 12:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				01/19/23 09:48	01/19/23 12:53	1

**Eurofins Carlsbad** 

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olins Carisbad

Job ID: 890-3857-1 SDG: 702520.051.01

Client Sample ID: S-1

Project/Site: COOPER 3

Date Collected: 01/10/23 13:35 Date Received: 01/13/23 14:47

Sample Depth: 2

Client: Talon/LPE

Lab Sample ID: 890-3857-2

Matrix: Solid

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

 Surrogate
 %Recovery [Auslifier]
 Limits [Image: New York of the Content of the Conten

**Method: TAL SOP Total BTEX - Total BTEX Calculation** 

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total BTEX
 <0.00100</td>
 U
 0.00398
 0.00100
 mg/Kg
 01/19/23 16:54
 1

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

 Analyte
 Result
 Qualifier
 RL
 MDL unit
 D mg/Kg
 Prepared
 Analyzed
 Dil Fac

 Total TPH
 129
 50.0
 15.0
 mg/Kg
 01/30/23 10:22
 1

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

Result Qualifier **MDL** Unit n Dil Fac **Analyte** Prepared Analyzed **Gasoline Range Organics** 18.7 J 50.0 15.0 mg/Kg 01/18/23 10:15 01/27/23 20:14 (GRO)-C6-C10 **Diesel Range Organics (Over** 110 \*+ \*1 50.0 15.0 mg/Kg 01/18/23 10:15 01/27/23 20:14 C10-C28) Oll Range Organics (Over C28-C36) 50.0 01/18/23 10:15 01/27/23 20:14 <15.0 U 15.0 mg/Kg

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Factor

 1-Chlorooctane
 86
 70 - 130
 01/18/23 10:15
 01/27/23 20:14
 1

 o-Terphenyl
 86
 70 - 130
 01/18/23 10:15
 01/27/23 20:14
 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

 Analyte
 Result Chloride
 Qualifier
 RL Sult Plan
 MDL Unit MDL Unit MDL MIT
 D Metal MDL MIT
 Prepared MIT
 Analyzed MIT
 Dil Fac MIT

 Chloride
 20.9
 5.01
 0.396 mg/Kg
 01/18/23 22:06
 1

Client Sample ID: S-1

Lab Sample ID: 890-3857-3

Date Collected: 01/10/23 13:38

Matrix: Solid

Date Collected: 01/10/23 13:38 Date Received: 01/13/23 14:47

Released to Imaging: 9/1/2023 10:26:03 AM

Sample Depth: 3

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

Analyte Result Qualifier RL**MDL** Unit D Dil Fac Prepared Analyzed Benzene <0.000382 U 0.00198 0.000382 mg/Kg 01/19/23 09:48 01/19/23 13:14 Toluene <0.000452 U 0.00198 0.000452 mg/Kg 01/19/23 09:48 01/19/23 13:14 Ethylbenzene <0.000561 U 0.00198 0.000561 mg/Kg 01/19/23 09:48 01/19/23 13:14 m-Xylene & p-Xylene <0.00100 U 0.00397 0.00100 mg/Kg 01/19/23 09:48 01/19/23 13:14 o-Xylene 0.000390 J 0.00198 0.000341 mg/Kg 01/19/23 09:48 01/19/23 13:14 Xylenes, Total <0.00100 U 0.00397 0.00100 mg/Kg 01/19/23 09:48 01/19/23 13:14 Surrogate %Recovery Qualifier Limits Prepared Analyzed

 Surrogate
 %Recovery 4-Bromofluorobenzene (Surr)
 Qualifier 111
 Limits 70 - 130
 Prepared 01/19/23 09:48
 Analyzed 01/19/23 13:14
 Dil Fac 01/19/23 09:48

 1,4-Diffuorobenzene (Surr)
 115
 70 - 130
 01/19/23 09:48
 01/19/23 13:14
 1

**Method: TAL SOP Total BTEX - Total BTEX Calculation** 

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total BTEX
 <0.00100</td>
 U
 0.00397
 0.00100
 mg/Kg
 01/19/23 16:54
 1

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

 Analyte
 Result Total TPH
 Qualifier
 RL Qualifier
 MDL Unit MDL Unit

Matrix: Solid

Lab Sample ID: 890-3857-3

Client: Talon/LPE Job ID: 890-3857-1 Project/Site: COOPER 3 SDG: 702520.051.01

Client Sample ID: S-1

Date Collected: 01/10/23 13:38

Date Received: 01/13/23 14:47 Sample Depth: 3

Analyte		Qualifier	DRO) (GC) RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.9	J	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 20:37	1
Diesel Range Organics (Over C10-C28)	81.4	*+ *1	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 20:37	1
Oll Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 20:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	01/18/23 10:15	01/27/23 20:37	1
o-Terphenyl	87		70 - 130	01/18/23 10:15	01/27/23 20:37	1
_						

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	93.2		5.00	0.395	mg/Kg			01/18/23 22:12	1

Lab Sample ID: 890-3857-4 Client Sample ID: S-2 Date Collected: 01/10/23 13:40 **Matrix: Solid** 

Date Received: 01/13/23 14:47

Sample Depth: 0 - 1

Method: SW846 8021B -	<ul> <li>Volatile Organic Compounds (</li> </ul>	GC)
Analyte	Result Qualifier	R

			( /						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		01/19/23 09:48	01/19/23 13:34	1
Toluene	< 0.000455	U	0.00200	0.000455	mg/Kg		01/19/23 09:48	01/19/23 13:34	1
Ethylbenzene	< 0.000564	U	0.00200	0.000564	mg/Kg		01/19/23 09:48	01/19/23 13:34	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		01/19/23 09:48	01/19/23 13:34	1
o-Xylene	< 0.000343	U	0.00200	0.000343	mg/Kg		01/19/23 09:48	01/19/23 13:34	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		01/19/23 09:48	01/19/23 13:34	1

	Surrogate	%Recovery Qualifier	Limits	Prepared Analyzed	Dil Fac
	4-Bromofluorobenzene (Surr)	105	70 - 130	01/19/23 09:48 01/19/23 13:34	1
l	1,4-Difluorobenzene (Surr)	111	70 - 130	01/19/23 09:48 01/19/23 13:34	1

## **Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			01/19/23 16:54	1

Method: SW846 8015 NM -	- Diesel Range Organics (DRO)	(GC)
	5 " 6 ""	

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	136	49.9	15.0 mg/Kg			01/30/23 10:22	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	17.0	J	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 21:01	1
Diesel Range Organics (Over C10-C28)	119	*+ *1	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 21:01	1
Oll Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	01/18/23 10:15	01/27/23 21:01	1
o-Terphenyl	89		70 - 130	01/18/23 10:15	01/27/23 21:01	1

Job ID: 890-3857-1

Client: Talon/LPE Project/Site: COOPER 3 SDG: 702520.051.01

Client Sample ID: S-2 Lab Sample ID: 890-3857-4 Matrix: Solid

Date Collected: 01/10/23 13:40 Date Received: 01/13/23 14:47

Sample Depth: 0 - 1

Method: EPA 300.0 - Anions, Id	on Chromat	tography -	Soluble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.7	F1	5.00	0.395	mg/Kg			01/18/23 22:18	1

**Client Sample ID: S-3** Lab Sample ID: 890-3857-5 Matrix: Solid

Date Collected: 01/10/23 13:43 Date Received: 01/13/23 14:47

Sample Depth: 0 - 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		01/19/23 09:48	01/19/23 13:55	1
Toluene	< 0.000459	U	0.00201	0.000459	mg/Kg		01/19/23 09:48	01/19/23 13:55	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		01/19/23 09:48	01/19/23 13:55	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		01/19/23 09:48	01/19/23 13:55	1
o-Xylene	< 0.000346	U	0.00201	0.000346	mg/Kg		01/19/23 09:48	01/19/23 13:55	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		01/19/23 09:48	01/19/23 13:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				01/19/23 09:48	01/19/23 13:55	1
1.4-Difluorobenzene (Surr)	114		70 - 130				01/19/23 09:48	01/19/23 13:55	1

Method: TAL SOP Total BTEX -	Total BTE	X Calculat	ion						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg			01/19/23 16:54	1

Method: SW846 8015 NM - Die	sel Range (	Organics	(DRO) (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	141		49.8	14.9	mg/Kg			01/30/23 10:22	1

Method: SW846 8015B NM - D	Diesel Range	Organics	(DRO) (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	17.9	J	49.8	14.9	mg/Kg		01/18/23 10:15	01/27/23 21:48	1
Diesel Range Organics (Over C10-C28)	123	*+ *1	49.8	14.9	mg/Kg		01/18/23 10:15	01/27/23 21:48	1
Oll Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		01/18/23 10:15	01/27/23 21:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				01/18/23 10:15	01/27/23 21:48	1
o-Terphenyl	95		70 - 130				01/18/23 10:15	01/27/23 21:48	1

Method: EPA 300.0 - Anions, Id	on Chromat	ography -	Soluble						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104		5.02	0.397	mg/Kg			01/18/23 22:35	1

 Client: Talon/LPE
 Job ID: 890-3857-1

 Project/Site: COOPER 3
 SDG: 702520.051.01

Client Sample ID: S-3

Date Collected: 01/10/23 13:47 Date Received: 01/13/23 14:47

Sample Depth: 2.5

Lab Sample ID: 890-3857-6

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		01/19/23 09:48	01/19/23 14:15	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		01/19/23 09:48	01/19/23 14:15	1
Ethylbenzene	< 0.000567	U	0.00201	0.000567	mg/Kg		01/19/23 09:48	01/19/23 14:15	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		01/19/23 09:48	01/19/23 14:15	1
o-Xylene	< 0.000345	U	0.00201	0.000345	mg/Kg		01/19/23 09:48	01/19/23 14:15	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		01/19/23 09:48	01/19/23 14:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				01/19/23 09:48	01/19/23 14:15	1
1,4-Difluorobenzene (Surr)	112		70 - 130				01/19/23 09:48	01/19/23 14:15	1
□ Method: TAL SOP Total BT	EY - Total RTE	Y Calculat	ion						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Total BTEX
 <0.00101</td>
 U
 0.00402
 0.00101
 mg/Kg
 01/19/23 16:54
 01/19/23 16:54

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)AnalyteResultQualifierRLMDLUnitDPreparedAnalyzedDil FacTotal TPH17350.015.0mg/KgDPreparedAnalyzedDil Fac

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac **Gasoline Range Organics** 50.0 15.0 mg/Kg 01/18/23 10:15 01/27/23 22:09 41.7 J (GRO)-C6-C10 **Diesel Range Organics (Over** 131 \*+ \*1 50.0 15.0 mg/Kg 01/18/23 10:15 01/27/23 22:09 C10-C28) 15.0 mg/Kg Oll Range Organics (Over C28-C36) <15.0 U 50.0 01/18/23 10:15 01/27/23 22:09

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Fac

 1-Chlorooctane
 106
 70 - 130
 01/18/23 10:15
 01/27/23 22:09
 1

 o-Terphenyl
 101
 70 - 130
 01/18/23 10:15
 01/27/23 22:09
 1

Method: EPA 300.0 - Anions, Ion Chromatography - SolubleAnalyteResultQualifierRLMDLUnitDPreparedAnalyzedDil FacChloride13.15.000.395mg/Kg0.1/18/23 22:4101/18/23 22:41

Client Sample ID: S-3

Lab Sample ID: 890-3857-7

Date Collected: 01/10/23 13:45

Matrix: Solid

Date Received: 01/13/23 14:47

Sample Depth: 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		01/19/23 09:48	01/19/23 14:36	1
Toluene	< 0.000454	U	0.00199	0.000454	mg/Kg		01/19/23 09:48	01/19/23 14:36	1
Ethylbenzene	< 0.000563	U	0.00199	0.000563	mg/Kg		01/19/23 09:48	01/19/23 14:36	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		01/19/23 09:48	01/19/23 14:36	1
o-Xylene	< 0.000343	U	0.00199	0.000343	mg/Kg		01/19/23 09:48	01/19/23 14:36	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		01/19/23 09:48	01/19/23 14:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				01/19/23 09:48	01/19/23 14:36	1

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Job ID: 890-3857-1

Client: Talon/LPE Project/Site: COOPER 3 SDG: 702520.051.01

Client Sample ID: S-3 Lab Sample ID: 890-3857-7

Date Collected: 01/10/23 13:45 **Matrix: Solid** Date Received: 01/13/23 14:47

Sample Depth: 2

Surrogate	%Recovery (	Qualifier	Limits	Prepared Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	01/19/23 09:48 01/19/23 14	36 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg				01/19/23 16:54	1

Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	44.0		49.9	15.0	mg/Kg			01/30/23 10:22	1

		. 9	(-:-)						
Analyte	Result Qu	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	44.0 J		49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 22:31	1
Diesel Range Organics (Over C10-C28)	<15.0 U	*+ *1	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 22:31	1
Oll Range Organics (Over C28-C36)	<15.0 U		49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 22:31	1
Surrogate	%Recovery O	ualifior	l imite				Propared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	01/18/23 10:15	01/27/23 22:31	1
o-Terphenyl	102		70 - 130	01/18/23 10:15	01/27/23 22:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qual		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.4	4.98	0.393	mg/Kg			01/18/23 22:59	1

Lab Sample ID: 890-3857-8 Client Sample ID: S-4 **Matrix: Solid** 

Date Collected: 01/10/23 14:05 Date Received: 01/13/23 14:47

Sample Depth: 0 - 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		01/18/23 16:20	01/19/23 16:14	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		01/18/23 16:20	01/19/23 16:14	1
Ethylbenzene	< 0.000564	U	0.00200	0.000564	mg/Kg		01/18/23 16:20	01/19/23 16:14	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		01/18/23 16:20	01/19/23 16:14	1
o-Xylene	< 0.000343	U	0.00200	0.000343	mg/Kg		01/18/23 16:20	01/19/23 16:14	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		01/18/23 16:20	01/19/23 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				01/18/23 16:20	01/19/23 16:14	1
1,4-Difluorobenzene (Surr)	102		70 - 130				01/18/23 16:20	01/19/23 16:14	1

L	Mothod: T/	יו פר	ID Tota	I RTEY	- Total	RTEY	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			01/20/23 13:52	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	79.5	49.9	15.0 mg/Kg			01/30/23 10:22	1

**Matrix: Solid** 

**Matrix: Solid** 

Lab Sample ID: 890-3857-8

Client: Talon/LPE Job ID: 890-3857-1 Project/Site: COOPER 3 SDG: 702520.051.01

Client Sample ID: S-4

Date Collected: 01/10/23 14:05 Date Received: 01/13/23 14:47

Sample Depth: 0 - 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	27.4	J	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 22:53	1
Diesel Range Organics (Over C10-C28)	52.1	*+ *1	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 22:53	1
Oll Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		01/18/23 10:15	01/27/23 22:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				01/18/23 10:15	01/27/23 22:53	1
o-Terphenyl	99		70 - 130				01/18/23 10:15	01/27/23 22:53	1

Analyte Result Qualifier **MDL** Unit Dil Fac RL Prepared Analyzed 4.95 0.391 mg/Kg 01/18/23 23:05 Chloride 107 Lab Sample ID: 890-3857-9

Client Sample ID: S-5

Date Collected: 01/10/23 14:08

Date Received: 01/13/23 14:47

Sample Depth: 0 - 1

Method: SW846 8021B - Volat	o.gao	- opou	( )						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		01/18/23 16:20	01/19/23 16:35	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		01/18/23 16:20	01/19/23 16:35	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		01/18/23 16:20	01/19/23 16:35	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		01/18/23 16:20	01/19/23 16:35	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		01/18/23 16:20	01/19/23 16:35	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		01/18/23 16:20	01/19/23 16:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				01/18/23 16:20	01/19/23 16:35	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130				01/18/23 16:20	01/19/23 16:35	1
Analyte Total RTEV		Qualifier	RL 0.00401	MDL 0.00101		D	Prepared	Analyzed	Dil Fac
Total BTEX  Method: SW846 8015 NM - Die Analyte	<0.00101	U	0.00401	0.00101	mg/Kg	<u></u> D	Prepared	01/20/23 13:52  Analyzed	1 Dil Fac
Total BTEX  Method: SW846 8015 NM - Die	<0.00101	Organics (	0.00401 DRO) (GC)	0.00101 <b>MDL</b>	mg/Kg	_ =	<u> </u>	01/20/23 13:52	1
Method: SW846 8015 NM - Die Analyte Total TPH Method: SW846 8015B NM - D	<0.00101 esel Range ( Result 39.9 esel Range	Organics ( Qualifier J Organics	0.00401  DRO) (GC) RL 49.9  (DRO) (GC)	0.00101 MDL 15.0	mg/Kg  Unit mg/Kg	<u></u> <u>D</u>	Prepared	01/20/23 13:52  Analyzed 01/30/23 10:22	Dil Fac
Method: SW846 8015 NM - Die Analyte Total TPH Method: SW846 8015B NM - D Analyte	<0.00101 esel Range ( Result 39.9 esel Range Result	Organics ( Qualifier  J Organics Qualifier	0.00401  DRO) (GC) RL 49.9  (DRO) (GC) RL	0.00101 MDL 15.0	mg/Kg  Unit mg/Kg  Unit	_ =	Prepared Prepared	01/20/23 13:52  Analyzed  01/30/23 10:22  Analyzed	1 Dil Fac
Method: SW846 8015 NM - Die Analyte Total TPH Method: SW846 8015B NM - D	<0.00101 esel Range ( Result 39.9 esel Range	Organics ( Qualifier  J Organics Qualifier	0.00401  DRO) (GC) RL 49.9  (DRO) (GC)	0.00101 MDL 15.0	mg/Kg  Unit mg/Kg	<u></u> <u>D</u>	Prepared	01/20/23 13:52  Analyzed 01/30/23 10:22	Dil Fac
Method: SW846 8015 NM - Die Analyte Total TPH  Method: SW846 8015B NM - D Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<0.00101 esel Range ( Result 39.9 esel Range Result <a href="#">39.9</a> esel Range Result <a href="#">&lt;15.0</a>	Organics ( Qualifier  J Organics Qualifier	0.00401  DRO) (GC) RL 49.9  (DRO) (GC) RL	0.00101  MDL 15.0  MDL 15.0	mg/Kg  Unit mg/Kg  Unit	<u></u> <u>D</u>	Prepared Prepared	Analyzed 01/27/23 23:15	Dil Fac
Total BTEX  Method: SW846 8015 NM - Die Analyte  Total TPH  Method: SW846 8015B NM - D Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<0.00101 esel Range ( Result 39.9 esel Range Result <a href="#">39.9</a> esel Range Result <a href="#">&lt;15.0</a>	Organics ( Qualifier  J Organics Qualifier  U  J*+*1	0.00401  DRO) (GC) RL 49.9  (DRO) (GC) RL 49.9	0.00101  MDL 15.0  MDL 15.0	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u></u> <u>D</u>	Prepared  01/18/23 10:15	Analyzed 01/20/23 13:52  Analyzed 01/30/23 10:22  Analyzed 01/27/23 23:15 01/27/23 23:15	Dil Fac  Dil Fac  1
Method: SW846 8015 NM - Die Analyte Total TPH  Method: SW846 8015B NM - D Analyte Gasoline Range Organics	<0.00101 esel Range ( Result 39.9 esel Range Result <a href="#">&lt;15.0</a> 39.9	Organics ( Qualifier J Organics Qualifier U J*+*1	0.00401  DRO) (GC) RL 49.9  (DRO) (GC) RL 49.9  49.9	0.00101  MDL 15.0  MDL 15.0	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u></u> <u>D</u>	Prepared  01/18/23 10:15  01/18/23 10:15	Analyzed 01/20/23 13:52  Analyzed 01/30/23 10:22  Analyzed 01/27/23 23:15 01/27/23 23:15	Dil Fac  Dil Fac  1

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01/18/23 10:15 01/27/23 23:15

70 - 130

104

o-Terphenyl

# **Client Sample Results**

 Client: Talon/LPE
 Job ID: 890-3857-1

 Project/Site: COOPER 3
 SDG: 702520.051.01

Client Sample ID: S-5 Lab Sample ID: 890-3857-9

Date Collected: 01/10/23 14:08

Matrix: Solid

Date Received: 01/10/23 14:47

Sample Depth: 0 - 1

Method: EPA 300 0 - Anions, Ion Chromatography - Soluble

Method. EPA 300.0 - Amons	s, ion Cinomatography - 3	Oluble					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.0	5.00	0.395 mg/Kg			01/18/23 23:11	1

-

7

8

10

12

13

## **Surrogate Summary**

Client: Talon/LPE Job ID: 890-3857-1 Project/Site: COOPER 3 SDG: 702520.051.01

Method: 8021B - Volatile Organic Compounds (GC)

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

		BFB1	DFBZ1	nt Surrogate Recovery (Acceptance I
ah Camula ID	Olicat Commis ID			
Lab Sample ID	Client Sample ID	<u>(70-130)</u>	(70-130)	
380-23861-A-1-A MS	Matrix Spike	113	87	
380-23861-A-1-B MSD	Matrix Spike Duplicate	93	103	
390-3857-1	S-1	94	113	
390-3857-1 MS	S-1	97	110	
390-3857-1 MSD	S-1	96	112	
390-3857-2	S-1	102	115	
390-3857-3	S-1	111	115	
390-3857-4	S-2	105	111	
390-3857-5	S-3	107	114	
90-3857-6	S-3	102	112	
390-3857-7	S-3	106	109	
390-3857-8	S-4	98	102	
390-3857-9	S-5	97	66 S1-	
.CS 880-44290/1-A	Lab Control Sample	89	98	
.CS 880-44316/1-A	Lab Control Sample	93	113	
CSD 880-44290/2-A	Lab Control Sample Dup	93	102	
CSD 880-44316/2-A	Lab Control Sample Dup	98	109	
MB 880-44290/5-A	Method Blank	88	97	
/IB 880-44316/5-A	Method Blank	95	108	

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

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

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

		4004		rrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3848-A-1-C MS	Matrix Spike	56 S1-	53 S1-	
890-3848-A-1-D MSD	Matrix Spike Duplicate	57 S1-	50 S1-	
890-3857-1	S-1	85	82	
890-3857-2	S-1	86	86	
890-3857-3	S-1	89	87	
890-3857-4	S-2	89	89	
890-3857-5	S-3	94	95	
890-3857-6	S-3	106	101	
890-3857-7	S-3	110	102	
890-3857-8	S-4	106	99	
890-3857-9	S-5	110	104	
LCS 880-44231/2-A	Lab Control Sample	141 S1+	154 S1+	
LCSD 880-44231/3-A	Lab Control Sample Dup	136 S1+	135 S1+	
MB 880-44231/1-A	Method Blank	171 S1+	166 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-3857-1 Client: Talon/LPE Project/Site: COOPER 3 SDG: 702520.051.01

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

Lab Sample ID: MB 880-44290/5-A

**Matrix: Solid** 

**Analysis Batch: 44311** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

Prep Batch: 44290

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		01/18/23 16:20	01/19/23 11:20	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		01/18/23 16:20	01/19/23 11:20	1
Ethylbenzene	< 0.000565	U	0.00200	0.000565	mg/Kg		01/18/23 16:20	01/19/23 11:20	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		01/18/23 16:20	01/19/23 11:20	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		01/18/23 16:20	01/19/23 11:20	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		01/18/23 16:20	01/19/23 11:20	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

70 - 130

70 - 130

Lab Sample ID: LCS 880-44290/1-A

**Matrix: Solid** 

**Analysis Batch: 44311** 

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

**Client Sample ID: Lab Control Sample** 

01/18/23 16:20 01/19/23 11:20

01/18/23 16:20 01/19/23 11:20

**Prep Type: Total/NA** Prep Batch: 44290

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1090		mg/Kg		109	70 - 130	
Toluene	0.100	0.1012		mg/Kg		101	70 - 130	
Ethylbenzene	0.100	0.1080		mg/Kg		108	70 - 130	
m-Xylene & p-Xylene	0.200	0.1965		mg/Kg		98	70 - 130	
o-Xylene	0.100	0.09984		mg/Kg		100	70 - 130	

LCS LCS

88

97

Surrogate	%Recovery Qual	ifier Limits
4-Bromofluorobenzene (Surr)	89	70 - 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: LCSD 880-44290/2-A

**Matrix: Solid** 

**Analysis Batch: 44311** 

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

Prep Batch: 44290

	Spike	LCSD	LCSD			%Rec		RPD
Analyte	Added	Result	Qualifier I	Unit	D %Rec	Limits	RPD	Limit
Benzene	0.100	0.1103	r	mg/Kg	110	70 - 130	1	35
Toluene	0.100	0.1026	r	mg/Kg	103	70 - 130	1	35
Ethylbenzene	0.100	0.1118	r	mg/Kg	112	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2046	r	mg/Kg	102	70 - 130	4	35
o-Xylene	0.100	0.1041	r	mg/Kg	104	70 - 130	4	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-23861-A-1-A MS

**Matrix: Solid** 

**Analysis Batch: 44311** 

**Client Sample ID: Matrix Spike** Prep Type: Total/NA

Prep Batch: 44290

_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.000387	U	0.100	0.07154		mg/Kg		71	70 - 130	
Toluene	<0.000459	U	0.100	0.08808		mg/Kg		88	70 - 130	

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

Lab Sample ID: 880-23861-A-1-A MS

Lab Sample ID: 880-23861-A-1-B MSD

**Matrix: Solid** 

**Analysis Batch: 44311** 

Client Sample ID: Matrix Spike

**Prep Type: Total/NA** 

Prep Batch: 44290

	Sample	Sample	<b>Spike</b>	MS	IVIS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.000568	U	0.100	0.1254		mg/Kg		125	70 - 130	
m-Xylene & p-Xylene	0.00223	J	0.200	0.2249		mg/Kg		111	70 - 130	
o-Xylene	0.00155	J	0.100	0.1122		mg/Kg		110	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 44290

**Matrix: Solid Analysis Batch: 44311** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.000387	U	0.0990	0.09766		mg/Kg		99	70 - 130	31	35
Toluene	<0.000459	U	0.0990	0.08982		mg/Kg		91	70 - 130	2	35
Ethylbenzene	<0.000568	U	0.0990	0.09844		mg/Kg		99	70 - 130	24	35
m-Xylene & p-Xylene	0.00223	J	0.198	0.1823		mg/Kg		91	70 - 130	21	35
o-Xylene	0.00155	J	0.0990	0.09234		mg/Kg		92	70 - 130	19	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-44316/5-A

**Matrix: Solid** 

**Analysis Batch: 44312** 

**Client Sample ID: Method Blank Prep Type: Total/NA** 

Prep Batch: 44316

-	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		01/19/23 09:48	01/19/23 12:04	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		01/19/23 09:48	01/19/23 12:04	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		01/19/23 09:48	01/19/23 12:04	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		01/19/23 09:48	01/19/23 12:04	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		01/19/23 09:48	01/19/23 12:04	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		01/19/23 09:48	01/19/23 12:04	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	l Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	01/19/23 09:48 01/19/23 12	:04 1
1,4-Difluorobenzene (Surr)	108		70 - 130	01/19/23 09:48 01/19/23 12	:04 1

Lab Sample ID: LCS 880-44316/1-A

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**Matrix: Solid** 

**Analysis Batch: 44312** 

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
B B ( 1 44040

Prep Batch: 44316

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08919		mg/Kg		89	70 - 130	
Toluene	0.100	0.09173		mg/Kg		92	70 - 130	
Ethylbenzene	0.100	0.08988		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1824		mg/Kg		91	70 - 130	

# QC Sample Results

Client: Talon/LPE Job ID: 890-3857-1 SDG: 702520.051.01 Project/Site: COOPER 3

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

Lab Sample ID: LCS 880-44316/1-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

Prep Type: Total/NA Prep Batch: 44316 **Analysis Batch: 44312** 

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits o-Xylene 0 100 0.08756 mg/Kg 88 70 - 130

LCS LCS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 93 70 - 130 1,4-Difluorobenzene (Surr) 113 70 - 130

Lab Sample ID: LCSD 880-44316/2-A **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

**Analysis Batch: 44312** Prep Batch: 44316 Spike LCSD LCSD %Rec **RPD** Added Result Qualifier %Rec Limits RPD **Analyte** Unit D

Limit Benzene 0.100 0.09534 mg/Kg 95 70 - 130 35 Toluene 0.100 0.09337 mg/Kg 93 70 - 130 2 35 Ethylbenzene 0.100 mg/Kg 92 70 - 130 35 0.09216 3 m-Xylene & p-Xylene 0.200 0.1896 95 70 - 130 35 mg/Kg o-Xylene 0.100 0.09054 mg/Kg 91 70 - 130 35

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 98 70 - 130 1,4-Difluorobenzene (Surr) 109 70 - 130

Lab Sample ID: 890-3857-1 MS Client Sample ID: S-1 Prep Type: Total/NA

**Matrix: Solid Analysis Batch: 44312** 

Prep Batch: 44316 Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Limits **Analyte** Unit D %Rec <0.000383 U Benzene 0.0998 0.09932 mg/Kg 100 70 - 130 0.09690 Toluene 0.000458 J 0.0998 mg/Kg 97 70 - 130 <0.000563 U Ethylbenzene 0.0998 0.09484 mg/Kg 95 70 - 130 m-Xylene & p-Xylene <0.00101 U 0.200 0.1940 mg/Kg 97 70 - 130 o-Xylene 0.000367 J 0.0998 0.09254 mg/Kg 92 70 - 130

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 97 1,4-Difluorobenzene (Surr) 70 - 130 110

Lab Sample ID: 890-3857-1 MSD

**Matrix: Solid** 

Analysis Batch: 44312									Prep E	saton: 4	14316
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.000383	U	0.100	0.09902		mg/Kg		99	70 - 130	0	35
Toluene	0.000458	J	0.100	0.09524		mg/Kg		95	70 - 130	2	35
Ethylbenzene	< 0.000563	U	0.100	0.09273		mg/Kg		93	70 - 130	2	35
m-Xylene & p-Xylene	<0.00101	U	0.200	0.1901		mg/Kg		95	70 - 130	2	35
o-Xylene	0.000367	J	0.100	0.09053		mg/Kg		90	70 - 130	2	35

**Eurofins Carlsbad** 

**Prep Type: Total/NA** 

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

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

Lab Sample ID: 890-3857-1 MSD

**Matrix: Solid** 

**Analysis Batch: 44312** 

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

Prep Batch: 44316

MSD MSD

%Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 96 70 - 130 1,4-Difluorobenzene (Surr) 112 70 - 130

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

Lab Sample ID: MB 880-44231/1-A

**Matrix: Solid** 

**Analysis Batch: 44896** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prep Batch: 44231

MD MD

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		01/18/23 10:15	01/27/23 11:09	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		01/18/23 10:15	01/27/23 11:09	1
Oll Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		01/18/23 10:15	01/27/23 11:09	1
	MD	MD							

MB MB

100 100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	171	S1+	70 - 130	01/18/23 10:15	01/27/23 11:09	1
o-Terphenyl	166	S1+	70 - 130	01/18/23 10:15	01/27/23 11:09	1

Lab Sample ID: LCS 880-44231/2-A

**Matrix: Solid** 

**Analysis Batch: 44896** 

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Prep Batch: 44231

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	771.5		mg/Kg		77	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1180		mg/Kg		118	70 - 130	
C10-C28)								

	LUJ	LUJ			
Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	141	S1+	70 - 130		
o-Terphenyl	154	S1+	70 - 130		

Lab Sample ID: LCSD 880-44231/3-A

Released to Imaging: 9/1/2023 10:26:03 AM

**Matrix: Solid** 

Analysis Batch: 44896

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA Prep Batch: 44231

Alialysis Datell. 77000							I ICP L	Jacon. 7	7201	
-	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	 1000	877.8		mg/Kg		88	70 - 130	13	20	
(GRO)-C6-C10	4000	4400	+. +4			4.40	70 400	00	00	
Diesel Range Organics (Over	1000	1489	*+ *1	mg/Kg		149	70 - 130	23	20	

C10-C28)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	136	S1+	70 - 130
o-Terphenyl	135	S1+	70 - 130

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

Lab Sample ID: 890-3848-A-1-C MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 44896** 

Prep Type: Total/NA

Prep Batch: 44231

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Added %Rec Limits Analyte Unit Gasoline Range Organics 37.2 J F1 F2 998 870.6 mg/Kg 84 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <15.0 U \*+ \*1 aga 831.0 83 mg/Kg 70 - 130

C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 56 S1-70 - 130 70 - 130 o-Terphenyl 53 S1-

Lab Sample ID: 890-3848-A-1-D MSD **Client Sample ID: Matrix Spike Duplicate** 

**Matrix: Solid** 

**Analysis Batch: 44896** 

Prep Type: Total/NA

Prep Batch: 44231

Sample Sample Spike MSD MSD %Rec **RPD** Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Gasoline Range Organics 37.2 J F1 F2 997 757.2 70 - 130 14 mg/Kg 72 20 (GRO)-C6-C10 Diesel Range Organics (Over <15.0 U \*+ \*1 997 792.2 mg/Kg 79 70 - 130 5 20 C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 57 S1-70 - 130 o-Terphenyl 50 S1-70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-44197/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 44281** 

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride <0.395 U 5.00 0.395 mg/Kg 01/18/23 20:38

Lab Sample ID: LCS 880-44197/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 44281** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 253.9 mg/Kg 102 90 - 110

Lab Sample ID: LCSD 880-44197/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Analysis Batch: 44281									
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	254.4		mg/Kg	_	102	90 - 110	0	20

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

Lab Sample ID: 890-3857-4 MSD

**Matrix: Solid** 

# **QC Sample Results**

Client: Talon/LPE Job ID: 890-3857-1 Project/Site: COOPER 3 SDG: 702520.051.01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3857-4 MS Client Sample ID: S-2 **Matrix: Solid Analysis Batch: 44281** 

**Prep Type: Soluble** 

%Rec Sample Sample Spike MS MS Result Qualifier Analyte Result Qualifier Added Unit D %Rec Limits Chloride 250 55.7 F1 258.0 F1 mg/Kg 81 90 - 110

Client Sample ID: S-2

**Prep Type: Soluble** 

**Analysis Batch: 44281** Sample Sample Spike MSD MSD %Rec **RPD Analyte** Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 55.7 F1 250 257.4 F1 90 - 110 0 mg/Kg 81

# **QC Association Summary**

Client: Talon/LPE Job ID: 890-3857-1 Project/Site: COOPER 3 SDG: 702520.051.01

## **GC VOA**

## Prep Batch: 44290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-8	S-4	Total/NA	Solid	5035	
890-3857-9	S-5	Total/NA	Solid	5035	
MB 880-44290/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-44290/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-44290/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-23861-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-23861-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## **Analysis Batch: 44311**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-8	S-4	Total/NA	Solid	8021B	44290
890-3857-9	S-5	Total/NA	Solid	8021B	44290
MB 880-44290/5-A	Method Blank	Total/NA	Solid	8021B	44290
LCS 880-44290/1-A	Lab Control Sample	Total/NA	Solid	8021B	44290
LCSD 880-44290/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	44290
880-23861-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	44290
880-23861-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	44290

## **Analysis Batch: 44312**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-1	S-1	Total/NA	Solid	8021B	44316
890-3857-2	S-1	Total/NA	Solid	8021B	44316
890-3857-3	S-1	Total/NA	Solid	8021B	44316
890-3857-4	S-2	Total/NA	Solid	8021B	44316
890-3857-5	S-3	Total/NA	Solid	8021B	44316
890-3857-6	S-3	Total/NA	Solid	8021B	44316
890-3857-7	S-3	Total/NA	Solid	8021B	44316
MB 880-44316/5-A	Method Blank	Total/NA	Solid	8021B	44316
LCS 880-44316/1-A	Lab Control Sample	Total/NA	Solid	8021B	44316
LCSD 880-44316/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	44316
890-3857-1 MS	S-1	Total/NA	Solid	8021B	44316
890-3857-1 MSD	S-1	Total/NA	Solid	8021B	44316

### Prep Batch: 44316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-1	S-1	Total/NA	Solid	5035	
890-3857-2	S-1	Total/NA	Solid	5035	
890-3857-3	S-1	Total/NA	Solid	5035	
890-3857-4	S-2	Total/NA	Solid	5035	
890-3857-5	S-3	Total/NA	Solid	5035	
890-3857-6	S-3	Total/NA	Solid	5035	
890-3857-7	S-3	Total/NA	Solid	5035	
MB 880-44316/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-44316/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-44316/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3857-1 MS	S-1	Total/NA	Solid	5035	
890-3857-1 MSD	S-1	Total/NA	Solid	5035	

#### Analysis Batch: 44395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-1	S-1	Total/NA	Solid	Total BTEX	

# **QC Association Summary**

Client: Talon/LPE Job ID: 890-3857-1 Project/Site: COOPER 3 SDG: 702520.051.01

# **GC VOA (Continued)**

## **Analysis Batch: 44395 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-2	S-1	Total/NA	Solid	Total BTEX	
890-3857-3	S-1	Total/NA	Solid	Total BTEX	
890-3857-4	S-2	Total/NA	Solid	Total BTEX	
890-3857-5	S-3	Total/NA	Solid	Total BTEX	
890-3857-6	S-3	Total/NA	Solid	Total BTEX	
890-3857-7	S-3	Total/NA	Solid	Total BTEX	
890-3857-8	S-4	Total/NA	Solid	Total BTEX	
890-3857-9	S-5	Total/NA	Solid	Total BTEX	

## **GC Semi VOA**

## Prep Batch: 44231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-1	S-1	Total/NA	Solid	8015NM Prep	
890-3857-2	S-1	Total/NA	Solid	8015NM Prep	
890-3857-3	S-1	Total/NA	Solid	8015NM Prep	
890-3857-4	S-2	Total/NA	Solid	8015NM Prep	
890-3857-5	S-3	Total/NA	Solid	8015NM Prep	
890-3857-6	S-3	Total/NA	Solid	8015NM Prep	
890-3857-7	S-3	Total/NA	Solid	8015NM Prep	
890-3857-8	S-4	Total/NA	Solid	8015NM Prep	
890-3857-9	S-5	Total/NA	Solid	8015NM Prep	
MB 880-44231/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-44231/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-44231/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3848-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3848-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 44896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-1	S-1	Total/NA	Solid	8015B NM	44231
890-3857-2	S-1	Total/NA	Solid	8015B NM	44231
890-3857-3	S-1	Total/NA	Solid	8015B NM	44231
890-3857-4	S-2	Total/NA	Solid	8015B NM	44231
890-3857-5	S-3	Total/NA	Solid	8015B NM	44231
890-3857-6	S-3	Total/NA	Solid	8015B NM	44231
890-3857-7	S-3	Total/NA	Solid	8015B NM	44231
890-3857-8	S-4	Total/NA	Solid	8015B NM	44231
890-3857-9	S-5	Total/NA	Solid	8015B NM	44231
MB 880-44231/1-A	Method Blank	Total/NA	Solid	8015B NM	44231
LCS 880-44231/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	44231
LCSD 880-44231/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	44231
890-3848-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	44231
890-3848-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	44231

### **Analysis Batch: 45007**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-1	S-1	Total/NA	Solid	8015 NM	
890-3857-2	S-1	Total/NA	Solid	8015 NM	
890-3857-3	S-1	Total/NA	Solid	8015 NM	
890-3857-4	S-2	Total/NA	Solid	8015 NM	

# **QC Association Summary**

 Client: Talon/LPE
 Job ID: 890-3857-1

 Project/Site: COOPER 3
 SDG: 702520.051.01

# GC Semi VOA (Continued)

## **Analysis Batch: 45007 (Continued)**

<b>Lab Sample ID</b> 890-3857-5	Client Sample ID S-3	Prep Type Total/NA	Matrix Solid	Method 8015 NM	Prep Batch
890-3857-6	S-3	Total/NA	Solid	8015 NM	
890-3857-7	S-3	Total/NA	Solid	8015 NM	
890-3857-8	S-4	Total/NA	Solid	8015 NM	
890-3857-9	S-5	Total/NA	Solid	8015 NM	

## HPLC/IC

### Leach Batch: 44197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-1	S-1	Soluble	Solid	DI Leach	
890-3857-2	S-1	Soluble	Solid	DI Leach	
890-3857-3	S-1	Soluble	Solid	DI Leach	
890-3857-4	S-2	Soluble	Solid	DI Leach	
890-3857-5	S-3	Soluble	Solid	DI Leach	
890-3857-6	S-3	Soluble	Solid	DI Leach	
890-3857-7	S-3	Soluble	Solid	DI Leach	
890-3857-8	S-4	Soluble	Solid	DI Leach	
890-3857-9	S-5	Soluble	Solid	DI Leach	
MB 880-44197/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-44197/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-44197/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3857-4 MS	S-2	Soluble	Solid	DI Leach	
890-3857-4 MSD	S-2	Soluble	Solid	DI Leach	

## **Analysis Batch: 44281**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3857-1	S-1	Soluble	Solid	300.0	44197
890-3857-2	S-1	Soluble	Solid	300.0	44197
890-3857-3	S-1	Soluble	Solid	300.0	44197
890-3857-4	S-2	Soluble	Solid	300.0	44197
890-3857-5	S-3	Soluble	Solid	300.0	44197
890-3857-6	S-3	Soluble	Solid	300.0	44197
890-3857-7	S-3	Soluble	Solid	300.0	44197
890-3857-8	S-4	Soluble	Solid	300.0	44197
890-3857-9	S-5	Soluble	Solid	300.0	44197
MB 880-44197/1-A	Method Blank	Soluble	Solid	300.0	44197
LCS 880-44197/2-A	Lab Control Sample	Soluble	Solid	300.0	44197
LCSD 880-44197/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	44197
890-3857-4 MS	S-2	Soluble	Solid	300.0	44197
890-3857-4 MSD	S-2	Soluble	Solid	300.0	44197

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Job ID: 890-3857-1

Client: Talon/LPE Project/Site: COOPER 3 SDG: 702520.051.01

Client Sample ID: S-1

Date Received: 01/13/23 14:47

Lab Sample ID: 890-3857-1 Date Collected: 01/10/23 13:30

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	44316	01/19/23 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44312	01/19/23 12:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44395	01/19/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45007	01/30/23 10:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44896	01/27/23 19:51	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 22:00	CH	EET MID

Client Sample ID: S-1 Lab Sample ID: 890-3857-2 Date Collected: 01/10/23 13:35 **Matrix: Solid** 

Date Received: 01/13/23 14:47

Batch Batch Dil Initial Final Batch Prepared Method **Prep Type** Type Run **Factor Amount** Amount Number or Analyzed **Analyst** Lab Total/NA 5035 44316 01/19/23 09:48 MNR EET MID Prep 5.03 g 5 mL 8021B Total/NA 5 mL 44312 01/19/23 12:53 MNR **EET MID** Analysis 5 mL 1 Total/NA Total BTEX Analysis 1 44395 01/19/23 16:54 AJ **EET MID** Total/NA 8015 NM 45007 **EET MID** Analysis 1 01/30/23 10:22 AJ Total/NA Prep 8015NM Prep 10.00 g 10 mL 44231 01/18/23 10:15 DM **EET MID** Total/NA 8015B NM 44896 01/27/23 20:14 AJ **EET MID** Analysis 1 uL 1 uL Soluble 4.99 g 50 mL 44197 01/17/23 16:43 KS Leach DI Leach **EET MID** Soluble 300.0 44281 01/18/23 22:06 CH Analysis 1 **EET MID** 

Client Sample ID: S-1 Lab Sample ID: 890-3857-3 Date Collected: 01/10/23 13:38 Matrix: Solid

Date Received: 01/13/23 14:47

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	44316	01/19/23 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44312	01/19/23 13:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44395	01/19/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45007	01/30/23 10:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44896	01/27/23 20:37	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 22:12	CH	EET MID

Client Sample ID: S-2 Lab Sample ID: 890-3857-4 Date Collected: 01/10/23 13:40 Matrix: Solid

Date Received: 01/13/23 14:47

Released to Imaging: 9/1/2023 10:26:03 AM

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	44316	01/19/23 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44312	01/19/23 13:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44395	01/19/23 16:54	AJ	EET MID

Client Sample ID: S-2 Lab Sample ID: 890-3857-4

Date Collected: 01/10/23 13:40 Matrix: Solid Date Received: 01/13/23 14:47

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			45007	01/30/23 10:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44896	01/27/23 21:01	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 22:18	CH	EET MID

Client Sample ID: S-3 Lab Sample ID: 890-3857-5

Date Collected: 01/10/23 13:43 **Matrix: Solid** 

Date Received: 01/13/23 14:47

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	44316	01/19/23 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44312	01/19/23 13:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44395	01/19/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45007	01/30/23 10:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44896	01/27/23 21:48	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 22:35	CH	EET MID

**Client Sample ID: S-3** Lab Sample ID: 890-3857-6 Date Collected: 01/10/23 13:47 **Matrix: Solid** 

Date Received: 01/13/23 14:47

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	44316	01/19/23 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44312	01/19/23 14:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44395	01/19/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45007	01/30/23 10:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44896	01/27/23 22:09	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 22:41	CH	EET MID

Client Sample ID: S-3 Lab Sample ID: 890-3857-7 Date Collected: 01/10/23 13:45 Matrix: Solid

Date Received: 01/13/23 14:47

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	44316	01/19/23 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44312	01/19/23 14:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44395	01/19/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45007	01/30/23 10:22	AJ	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.03 g 1 uL	10 mL 1 uL	44231 44896	01/18/23 10:15 01/27/23 22:31	DM AJ	EET MID EET MID

Client Sample ID: S-3 Lab Sample ID: 890-3857-7

Date Collected: 01/10/23 13:45 **Matrix: Solid** Date Received: 01/13/23 14:47

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 22:59	CH	EET MID

Client Sample ID: S-4 Lab Sample ID: 890-3857-8

Date Collected: 01/10/23 14:05 Matrix: Solid Date Received: 01/13/23 14:47

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	44290	01/18/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44311	01/19/23 16:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44395	01/20/23 13:52	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45007	01/30/23 10:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44896	01/27/23 22:53	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	44197	01/17/23 16:43	KS	EET MID
Soluble	Analysis	300.0		1			44281	01/18/23 23:05	CH	EET MID

Lab Sample ID: 890-3857-9 Client Sample ID: S-5

Date Collected: 01/10/23 14:08 Matrix: Solid Date Received: 01/13/23 14:47

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	44290	01/18/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	44311	01/19/23 16:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44395	01/20/23 13:52	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45007	01/30/23 10:22	AJ	EET MI
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	44231	01/18/23 10:15	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	44896	01/27/23 23:15	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	44197	01/17/23 16:43	KS	EET MI
Soluble	Analysis	300.0		1			44281	01/18/23 23:11	CH	EET MII

#### **Laboratory References:**

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

# **Accreditation/Certification Summary**

 Client: Talon/LPE
 Job ID: 890-3857-1

 Project/Site: COOPER 3
 SDG: 702520.051.01

## **Laboratory: Eurofins Midland**

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-25	06-30-23
The following analyte	s are included in this reno	ort but the laboratory is r	not certified by the governing authority.	This list may include analytee for w
the agency does not	•	ort, but the laboratory is i	lot certified by the governing authority.	This list may include analytes for w
	•	Matrix	Analyte	This list may include analytes for w
the agency does not	offer certification.	•		This list may include analytes for w

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# **Method Summary**

Client: Talon/LPE

Method

Total BTEX

8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

8021B

Project/Site: COOPER 3

Job ID: 890-3857-1 SDG: 702520.051.01

EET MID

Protocol	Laboratory
SW846	EET MID
TAL SOP	EET MID
SW846	EET MID
SW846	EET MID
EPA	EET MID
SW846	EET MID

SW846

**ASTM** 

#### **Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

Microextraction

**Method Description** 

**Total BTEX Calculation** 

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

**Deionized Water Leaching Procedure** 

Anions, Ion Chromatography

Closed System Purge and Trap

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### **Laboratory References:**

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

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# **Sample Summary**

Client: Talon/LPE

Project/Site: COOPER 3

Job ID: 890-3857-1 SDG: 702520.051.01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3857-1	S-1	Solid	01/10/23 13:30	01/13/23 14:47	0 - 1
890-3857-2	S-1	Solid	01/10/23 13:35	01/13/23 14:47	2
890-3857-3	S-1	Solid	01/10/23 13:38	01/13/23 14:47	3
890-3857-4	S-2	Solid	01/10/23 13:40	01/13/23 14:47	0 - 1
890-3857-5	S-3	Solid	01/10/23 13:43	01/13/23 14:47	0 - 1
890-3857-6	S-3	Solid	01/10/23 13:47	01/13/23 14:47	2.5
890-3857-7	S-3	Solid	01/10/23 13:45	01/13/23 14:47	2
890-3857-8	S-4	Solid	01/10/23 14:05	01/13/23 14:47	0 - 1
890-3857-9	S-5	Solid	01/10/23 14:08	01/13/23 14:47	0 - 1

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Relinquished by: (Signature)

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Revised Date: 08/25/2020 Rev. 2020.2

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# Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334

,		]	
	Work Order Comments	www.xenco.com Page of	Work Order No:

Environment Testing	Midland, TX (	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	Work Order No:	
Xenco	EL Paso, T)	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	}	/
			www.xenco.com Page of	
Project Manager: Kayla Taylor	Bill to: (if different)		Work Order Comments	
	Company Name:		Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund [	≱rfund □
	Address:			]
City, State ZIP: Artesia, NM 88210	City, State ZIP:		T   TRRP	Level IV 🗀
575.746.8768	Email:		Deliverables: EDD	
Project Name: Cooper3	Turn Around	ANALYSIS REC	QUEST Preservative Codes	des
er: 702	tine Rush Code		None: NO DI Wa	DI Water: H <sub>2</sub> O
Project Location: Lea Due Date:	ate:		Cool: Cool MeOH: Me	: Me
er's Name: Nrose	TAT starts the day received by			IZ
TO#			12004. 12	
Temp Blank:			H <sub>3</sub> PO <sub>4</sub> : HP	
Cooler Custody Seals: Yes No N/A Correction Factor:	Par	800 3857 Ch	Son 3857 Chain of Custody Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> . NaSO <sub>3</sub>	
Yes No N/A	ng:	E	-	
Total Containers: Corrected Temperature:	ture: 1-0	12 P	NaOH+Ascorbic Acid: SAPC	APC
Sample Identification Matrix Sampled Sampled Sampled	led Depth Grab/ # of Comp Cont	C B	Sample Comments	ents
5-1 52-11/-10-23 1:30	0 0-1 bow 1	メスメ		
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5-3	3 0-1			
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5-4	5 0-10-1			
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			Market Market Control of the Control	
Total 200.7 / 6010 200.8 / 6020: 8RCRA Circle Method(s) and Metal(s) to be analyzed TCLI	TCLP / SPLP 6010: 8RCRA	Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb  Sb As Ba Be Cd Cr Co Cu Pb Mn Mo	Ni Se Ag TI U Hg: 1631/245.1/7470 /7471	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control	valid purchase order from client ot assume any responsibility for	company to Eurofins Xenco, its affiliates and subcontracton iny losses or expenses incurred by the client if such losses	s. It assigns standard terms and conditions are due to circumstances beyond the control	
or Euronis Aenco. A minimum charge of 305,00 will be applied to each project and a charge of 30 for each sample subminister to	allu a cilaige of 45 for each sain	a submitted to raisons year to an analysis and the same		
Relinquished by: (Signature) Received by: (Signature)		Date/Time Relinquished by: (Signature)	ture) Received by: (Signature) Date/Time	ime

Deliverable Requested I II III IV Other (specify)

Primary Deliverable Rank

Date

Company

Ime

Method of Shipment Date/Time

Company

Special Instructions/QC Requirements

Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon

Company Company

Received by

Date/Time

Compan Company

cooler Temperature(s) °C and Other Remarks

Empty Kit Relinquished by

Custody Seals Intact:

Custody Seal No

Yes ⊳ No

elinquished by

Date/Time Date/Time Possible Hazard Identification

S-4 (890-3857-8)

S-5 (890-3857-9)

aboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.

Vote. Since laboratory accreditations are subject to change. Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories.

1/10/23 1/10/23 1/10/23 1/10/23 1/10/23 1/10/23 1/10/23 1/10/23 1/10/23

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S-3 (890-3857-6) S-3 (890-3857-5)

S-3 (890-3857-7)

S-1 (890-3857-3)

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Mountain 13 40

S-1 (890-3857-2) S-1 (890-3857-1) Sample Identification - Client ID (Lab ID)

Sample Date

(C=comp, Sample Type

(W=water S=solid, O=waste/oil, BT=Tissue,

Total\_BTEX\_GCV

8015MOD Calc

→ X Total Number of containers

Perform MS/MSD (Yes or No)

8021B/5035FP\_Calc (MOD) BTEX

300\_ORGFM\_28D/DI\_LEACH Chloride

8021B/5035FP\_Calc (MOD) BTEX and MTBE

8015MOD\_NM/8015NM\_S\_Prep (MOD) Full TPH

Ice DI Water C EDTA EDA

≺ ≶

other (specify)

MCAA V pH 4-5

MeOH

Ascorbic Acid

M Hexane
N Mone
O AsNaO2
P Na2O4S
Q Na2SO3
R Na2S2O3
S H2SO4
T TSP Dodecahydrate
U Acetone
V MCAA

13 30

Preservation Code:

S-2 (890-3857-4)

Carlsbad, NM 88220 Phone 575-988-3199 Fax 575-988-3199

Project Name: COOPER 3

Project #: 89000040

¥:

State Zip: TX, 79701

Midland

1211 W Florida Ave

TAT Requested (days) Due Date Requested

Eurofins Environment Testing South Centr

Shipping/Receiving

lient Information

(Sub Contract Lab)

hone

Jessica Kramer@et.eurofinsus com
Accreditations Required (See note)

State of Origin: New Mexico

Carrier Tracking No(s)

COC No 890-1102 1

Page 1 of 1 890-3857-1

NELAP - Texas

Analysis Requested

Preservation Codes.

M I
A HCL N I
B NaOH O
C Zn Acetate P I

HCL NaOH Zn Acetate Nitric Acid

Kramer Jessica Lab PM

432-704-5440(Tel)

**Eurofins Carlsbad** 1089 N Canal St.

# Chain of Custody Record

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💸 eurofins

Environment Testing

Special Instructions/Note:

Released to Imaging: 9/1/2023 10:26:03 AM

Months

Page 31 of 33

1/31/2023 (Rev. 1)

# **Login Sample Receipt Checklist**

Client: Talon/LPE Job Number: 890-3857-1 SDG Number: 702520.051.01

Login Number: 3857 **List Source: Eurofins Carlsbad** 

List Number: 1 Creator: Clifton, Cloe

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

# **Login Sample Receipt Checklist**

 Client: Talon/LPE
 Job Number: 890-3857-1

 SDG Number: 702520.051.01

Login Number: 3857
List Source: Eurofins Midland
List Number: 2
List Creation: 01/17/23 11:09 AM

Creator: Teel, Brianna

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

Euronnis Carisbau

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District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 259521

#### **CONDITIONS**

Operator:	OGRID:
MATADOR PRODUCTION COMPANY	228937
One Lincoln Centre	Action Number:
Dallas, TX 75240	259521
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
amaxwell	None None	9/1/2023