



Attn: New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Release Investigation, and Closure Report  
Cedar Breaks Walters Lake St. 1 6" Steel Line  
Unit M, Section 2, Township 18 South, Range 30 East  
32.772122°, -103.948648°  
Eddy County, New Mexico  
Terracon Project No. KH237027

To Whom it May Concern:

Terracon Consultants, Inc. (Terracon) is pleased to submit our Release Investigation and Closure Report for the site referenced above. The scope of services was developed in accordance with the New Mexico Oil Conservation Division (NMOCD) regulations concerning clean-up actions required for releases of natural gas and condensate. The investigative response actions were taken as the result of a natural gas release from a suspected corroded lateral line. The below sections detail Terracon's assessment and remediation actions in response to the noted release.

### Action Items

#### Completed Actions

- 1) Initial site assessment and sampling events completed.
- 2) All conditions needed for approval of closure have been met.
- 3) All Maps and associated data for approval have been provided
- 4) Conducted an initial site assessment and a series of sampling events.
- 5) Soil samples collected from the excavation were submitted to an approved analytical laboratory to determine levels of impact vertically and horizontally.
- 6) Excavation of the inferred release area was completed with the intent to remove impacted soil as determined by the Closure Criteria set by NMOCD.
- 7) All soil stockpiles on site were placed on plastic and bermed around the edges to reduce loss.
- 8) All confirmation samples were collected every 200 sq. ft.
- 9) Remedial activities were terminated when a confirmation sample was collected below the NMOCD RALs for Oil and Gas impacted soils.

Explore with us

**Frontier Field Services, LLC**

Cedar Breaks Walters Lake St. 1 6" Steel Line

32.772122°, -103.948648°

NMOCD Reference # nAPP2303731028

Terracon Project # KH237027



**Anticipated Actions**

- 
- 1) Following the acceptance of this closure report all areas of the excavation will be backfilled and brought to the surrounding grade and reseeded.
  - 2) Approval by the NMOCD.
- 

Terracon appreciates this opportunity to provide environmental services to Frontier Field Services, LLC. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

**Terracon Consultants, Inc.**

A handwritten signature in black ink, appearing to read 'Travis Casey', is written over the printed name.

**Travis Casey**

Senior Staff Scientist  
Carlsbad

**Erin Loyd, P.G. (TX)**

Senior Principal  
Office Manager – Lubbock

## TABLE OF CONTENTS

### Table of Contents

Section 1 – Incident Information.....	2
Section 2 – General Site Characteristics.....	3
Section 3 – Regulatory Framework and Response Action Levels .....	3
Section 4 – Remediation Activities .....	5
Section 5 – Remediation Confirmation Assessment.....	5
Section 6 – Analytical Results.....	5
Section 7 – Conclusion and Closure Request.....	6

#### Attachments:

##### Appendix A – Exhibits

- Exhibit 1 – Topographic Map
- Exhibit 2 – Site Location Map
- Exhibit 3 – Site Sample Map
- Exhibit 4 – NMOSE POD Location Map
- Exhibit 5 – Designated Wetland Area Map
- Exhibit 6 – Cave Karst Public UCP Map

##### Appendix B – Tables and Well Data

- Table 1 – Soil Sample Analytical Results

##### Appendix C – Photographic Log

##### Appendix D – Analytical Report and Chain of Custody

##### Appendix E – Initial Form C-141 and Final Form C-141

##### Appendix F – Terracon Standard of Care, Limitation, and Reliance

Frontier Field Services, LLC  
 Cedar Breaks Walters Lake St. 1 6" Steel Line  
 32.772122°, -103.948648°  
 NMOCD Reference # nAPP2303731028  
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## Section 1 – Incident Information

The following table provides detailed information regarding the February 4, 2023, natural gas and condensate liquid release at the Cedar Breaks Walters Lake St. 1 6" Steel Line (Cedar Breaks Walters) site in Eddy County, New Mexico:

Required Information	Site and Release information	
Responsible party	The pipeline is operated by Frontier Field Services LLC	
Local contact	Contact: Ms. Amber Groves	P: (575)-703-7992 E: <a href="mailto:agroves@durangomidstream.com">agroves@durangomidstream.com</a>
NMOCD Notification	Notice of the release was provided to the NMOCD District 2 Artesia Office by Ms. Amber Groves on February 6, 2023. NMOCD Reference ID: nAPP2303731028	
Facility Description	Cedar Breaks Walters is in Eddy County, New Mexico. It is an area located within Unit M, Section 2, Township 18 South, Range 30 East, approximately 12.32 miles southwest of Maljamar, New Mexico. The site is predominantly developed oil and gas Right of Way (ROW). State Land Office (SLO) owned native pastureland.	
Time of incident	February 4, 2023, discovered during third-party excavation.	
Discharge event	The natural gas pipeline leak was caused by external and internal corrosion. The Site is illustrated in Exhibits 1 and 2 of Appendix A	
Type of discharge	The documented natural gas release occurred in an open right-of-way (ROW), SLO-owned, native pastureland area. Soils at the site are affected at the surface and beyond the depth of the pipeline.	
Quantity of spilled material	Total Fluids: 1 bbls.	Natural Gas: 156.95 Mcf
Site characteristics	Relatively flat with drainage following the natural ground surface; very gently sloping to the southeast.	
Immediate corrective actions	The leaking pipeline was closed in at the nearest isolation valve, blown down, and clamped. A backhoe was utilized to excavate impacted soils around line strike to discover the source of the release.	



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## Section 2 – General Site Characteristics

Physical Characteristic	Site Ranking Characteristics
Groundwater NMOSE POD Location Map – (Exhibit 6 in Appendix A)	<p><u>POD Number:</u> (RA-11590 POD 1)</p> <p><u>Depth to Groundwater:</u> &gt;55 ft. bgs</p> <p><u>Distance to Well:</u> 4.05 miles to the northeast</p> <p><u>Date Drilled:</u> January 22, 2010</p> <p><u>Groundwater Quality:</u> Groundwater quality at the site is predominately used for livestock production.</p>
Surface Water NM Wetland Map – (Exhibit 7 in Appendix A)	Man-Made Livestock Lake (unnamed), approximately 5.71 miles to the southeast.
100-Year Flood Plain	This site is located outside the 100-year flood plain of the Pecos River.
Soil Characteristics	Soils at the site are mapped as Kermit-Berino Fine Sand series soils, 0 to 3 percent slopes, well-drained, 4 to 12 inches single-grained; loose; few fine roots; very porous; few dark organic stains; noncalcareous; neutral; gradual smooth boundary. (6 to 12 inches thick). The formation is categorized with a very high runoff classification.
Karst Characterization Cave Karst Public UCP Map – (Exhibit 8 in Appendix A)	Terracon evaluated data from the NMOCD Public FTP Site, Karst map designations in reference to the site location. The site appears to be within a low-level Karst risk area. Based on on-site observations within the extent of the release margins, the potential for Karst formations in this specific area are of low potential, as illustrated in Exhibit 6. Restrictive features were not encountered from surface to 96 inches below grade surface (bgs) within the release margins. The full extent of release quantities and excavation activities did not extend greater than 96 inches bgs.

## Section 3 – Regulatory Framework and Response Action Levels

Oil and gas exploration and production facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). The NMOCD has issued the *Closure Criteria*

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for Soils Impacted by a Release, June 21, 2018, and Restoration, Reclamation, and Re-vegetation (19.15.29.13) NMAC – D (Reclamation of areas no longer in use) as guidance documents for the remediation and reclamation of sites impacted by releases from oil and gas exploration and production activities. Sections detailed below the applicability of these guidance documents to the site-specific characteristics associated with the Cedar Breaks Walters.

### Section 3.1 – Reclamation Levels (Surface to 4 ft. bgs)

The below Reclamation Limits for chlorides, TPH (GRO+DRO+MRO), BTEX (includes benzene, toluene, ethylbenzene, and xylenes), and benzene are defined within New Mexico Administration Code (NMAC) Restoration, Reclamation, and Re-vegetation (19.15.29.13) New Mexico Administration Code (NMAC) – D (Reclamation of areas no longer in use) for soils extending to 4 ft. bgs.:

Constituent	Remediation Limits
Chloride	600 mg/kg
TPH (GRO+DRO+MRO)	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

### Section 3.2 – Remediation Levels (> 4 ft. bgs)

Based on the site-specific characteristics, the applicable NMOCD remediation levels for Total BTEX, chloride, and TPH within soils, exclusive of the Reclamation Zone (surface to 4 ft. bgs), are as follows:

Constituent	Remediation Limit
Chloride	600 mg/kg
TPH (GRO+DRO+MRO)	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

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## Section 4 – Remediation Activities

On March 28, 2023, Terracon mobilized to the site to meet Remediation Construction Services (RCS) personnel, who were to perform soil remediation activities. Areas exhibiting visual impact were excavated to a depth of approximately 4 to 8 feet bgs.

Approximately 220 cubic yards of soil were excavated and stockpiled atop a polyethylene liner pending waste characterization and disposal under an approved Form C-138. Excavation efforts ceased based on the results of removing visual impacts. Excavated materials were disposed of at Lea Land Landfill.

## Section 5 - Remediation Confirmation Assessment

A total of 14 composite soil samples (N-SW-01 through 03.2, S-SW-01 through 03.2, E-SW-01, W-SW-01-1.2, and FS-01 through 03) were collected from the excavation, placed in laboratory-provided sample containers, preserved with ice, and transported under a chain of custody to Cardinal Laboratories in Hobbs, New Mexico for analysis of BTEX, TPH, and chlorides.

Three Background (BG) grab samples were collected 50-100 feet uphill of the excavation to test for background chlorides.

## Section 6 – Analytical Results

Composite soil samples collected on March 28, 2023, only nine samples exhibited concentrations of TPH (EPA Method 8015M) above sample detection limits (SDLs). However, still under the NMOCD closure criteria.

Two of the BG samples exhibited concentrations of TPH (EAP Method 8015M) above sample detection limits (SDLs). However, still under the NMOCD closure criteria.

All composite samples collected from the excavation area exhibited concentrations of chloride above laboratory sample detection limits and ranging from 16.0 mg/kg in S-SW-03.1 (0-4 feet) to 192 mg/kg in W-SW-01 (4-8 feet).

Two grab samples collected for BG exhibited concentrations of chloride above laboratory sample detection limits and ranging from 64.0 mg/kg in BG-3 (2 feet) to 672 mg/kg in BG-1 (2 feet).

A summary of BTEX, chloride and TPH concentrations of all collected soil samples is attached as Table 1.

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Cedar Breaks Walters Lake St. 1 6" Steel Line  
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NMOCD Reference # nAPP2303731028  
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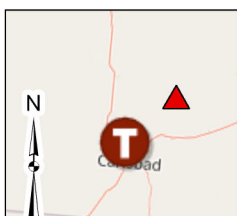
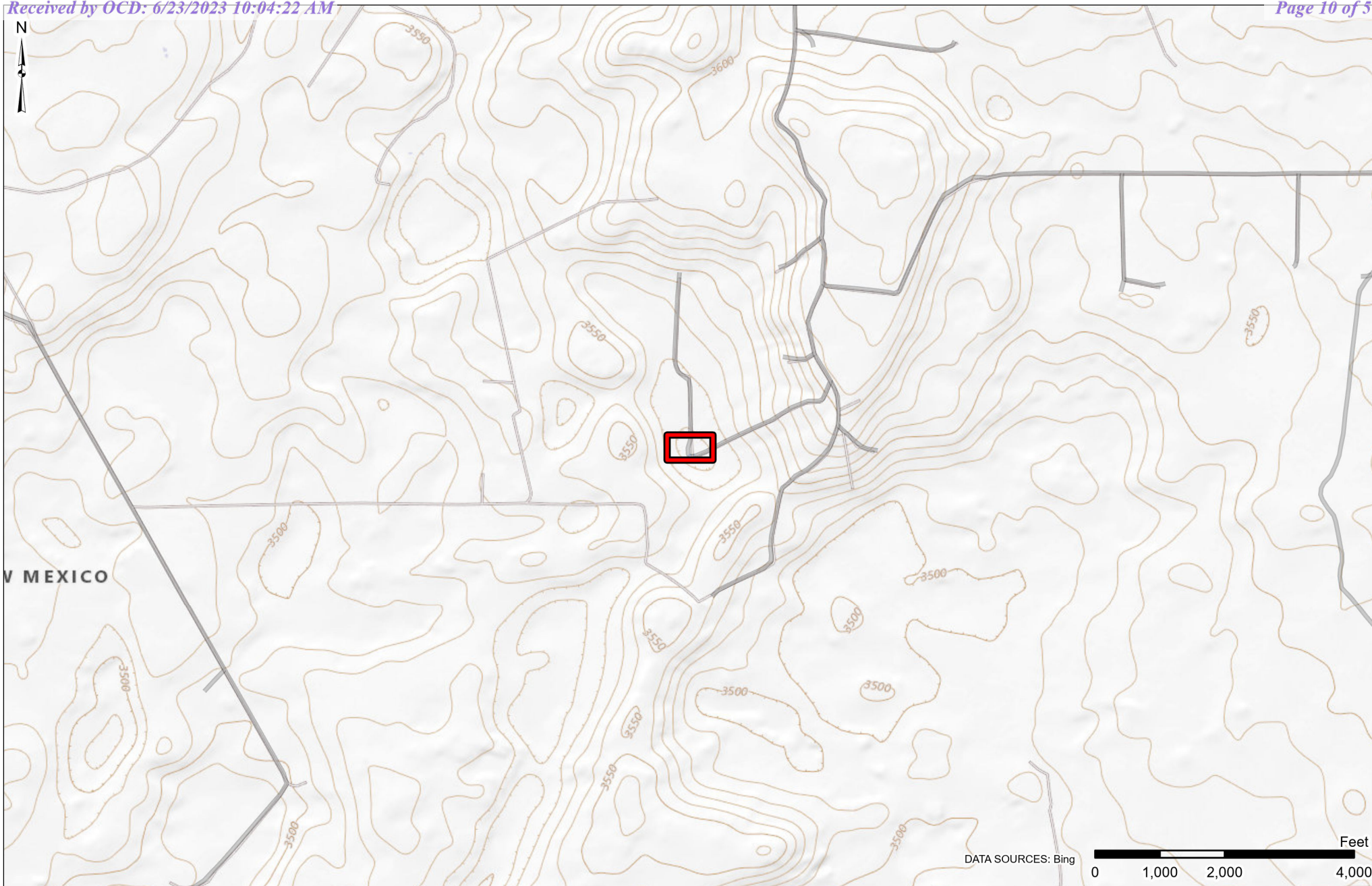


## Section 7 – Conclusion and Closure Request

Based on the laboratory results of the confirmation sampling following excavation activities, the response action of the release at the Cedar Breaks Walter Lake St. 1 6" Steel Line facility on March 28, 2023, has met the closure criteria defined in accordance with NMAC 19.15.29.12. Terracon respectfully requests regulatory closure of incident nAPP2303731028 on the behalf of Frontier Field Services.

## **APPENDIX A – EXHIBITS**





 Site Location

Project No.:  
KH237027  
Date:  
Jun 13 2023  
Drawn By:  
JWL  
Reviewed By:  
TLC



4518 W Pierce St  
Carlsbad, NM

PH. 806-300-0140

terracon.com

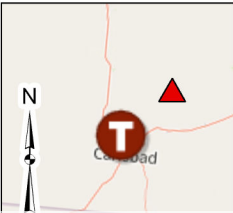
### Topographic Map

Cedar Breaks Walter Lake St. 1 6" Steel Line  
Durango  
32.772122°, -103.948648°

### Exhibit


1





 Excavation Boundary

Project No.:	KH237027
Date:	June 16 2023
Drawn By:	JWL
Reviewed By:	TLC

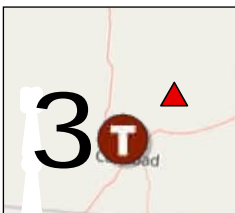
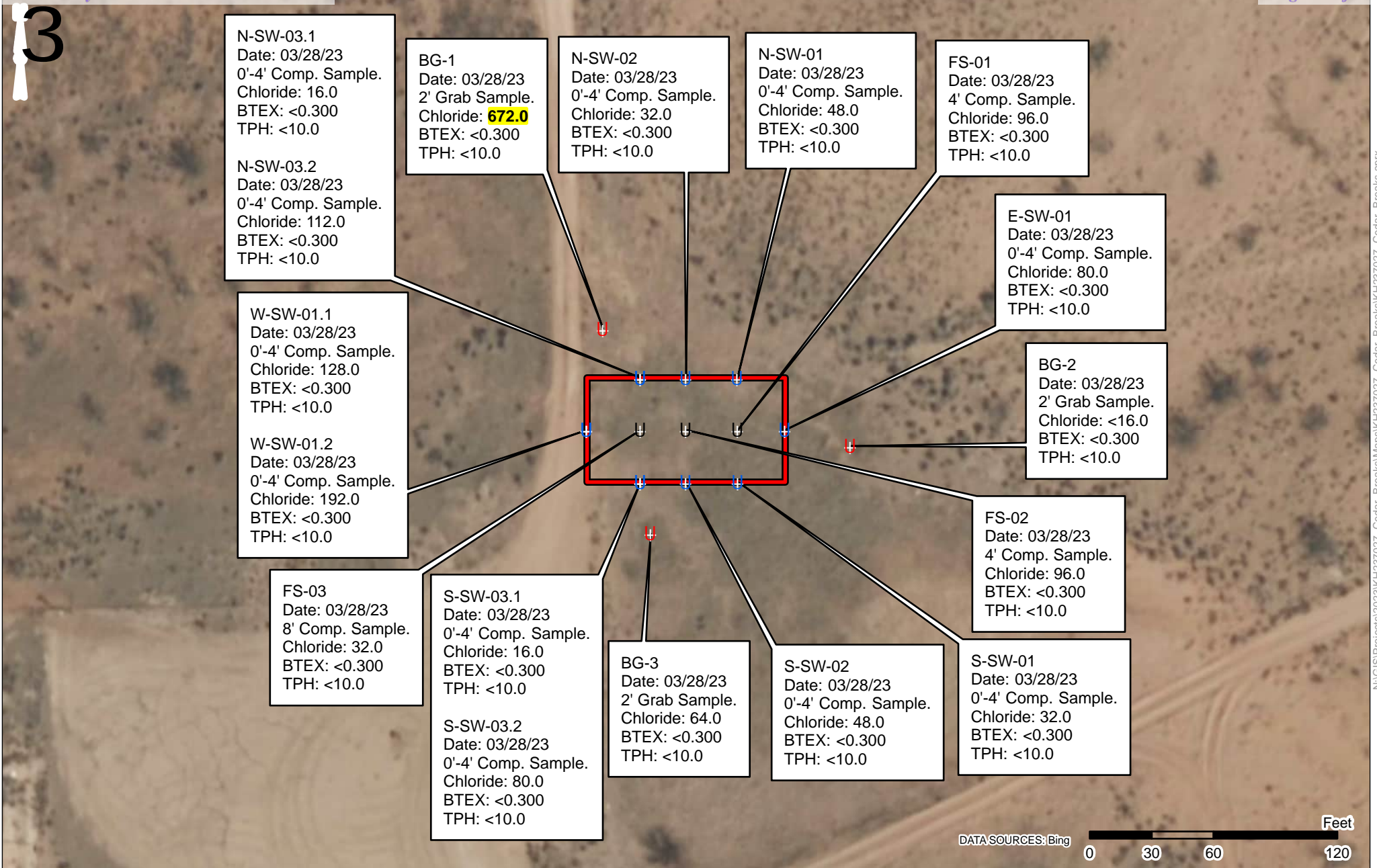


4518 W Pierce St  
Carlsbad, NM

PH. 806-300-0140      [terracon.com](http://terracon.com)

Site Location Map
Cedar Breaks Walter Lake St. 1 6" Steel Line Durango 32.772122°, -103.948648°

Exhibit
2



Excavation Boundary

Sample Locations

Boring

Floor

Side Wall

Project No.:  
KH237027

Date:  
June 16 2023

Drawn By:  
JWL

Reviewed By:  
TLC



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Carlsbad, NM

PH. 806-300-0140

terracon.com

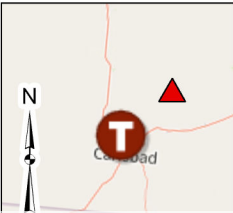
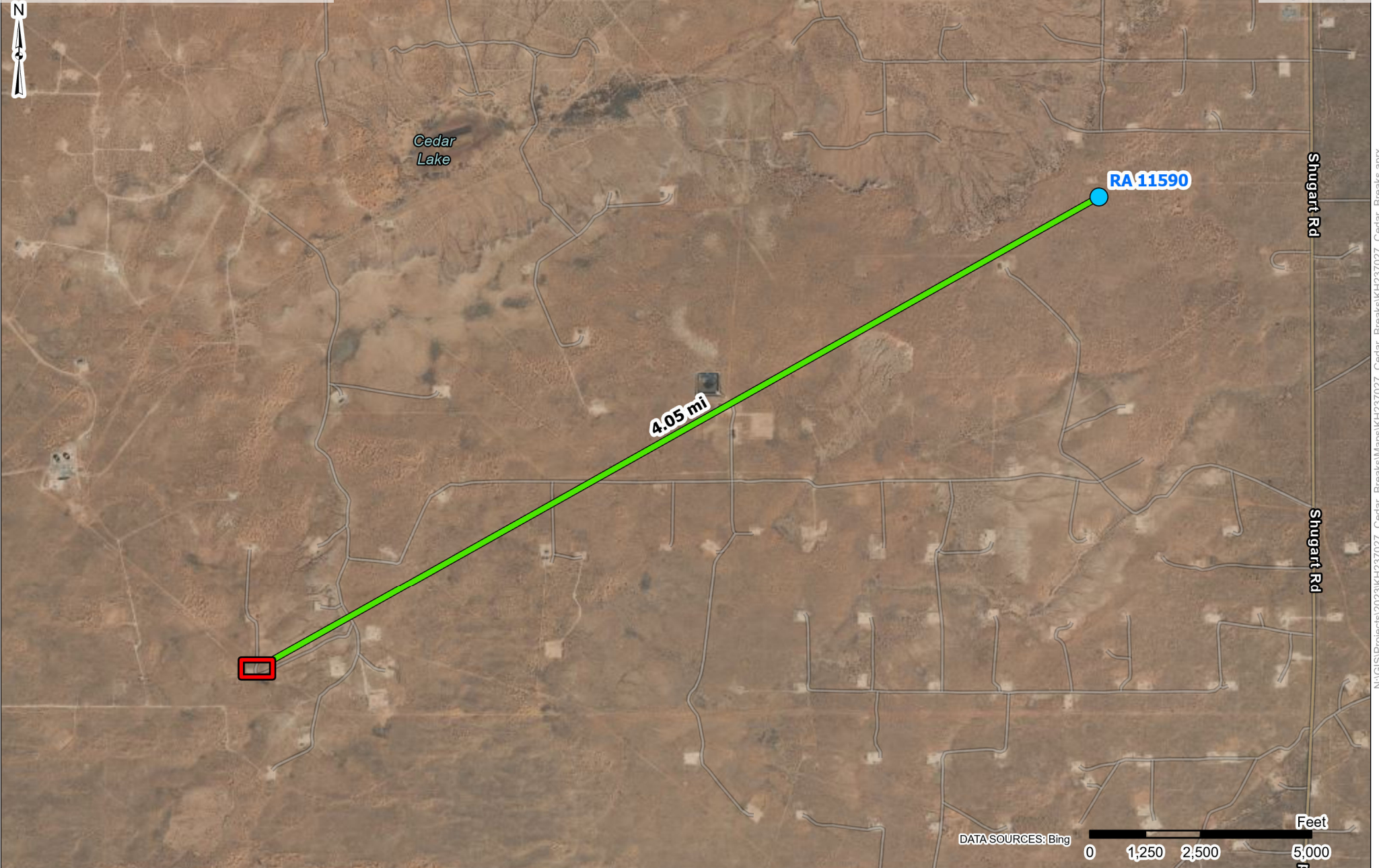
### Site Sample Map

Cedar Breaks Walter Lake St. 1 6" Steel Line  
Durango  
32.772122°, -103.948648°

### Exhibit

3






- Site Location
- NMOSE POD Location

Project No.:  
KH237027

Date:  
Jun 13 2023

Drawn By:  
JWL

Reviewed By:  
TLC



4518 W Pierce St  
Carlsbad, NM

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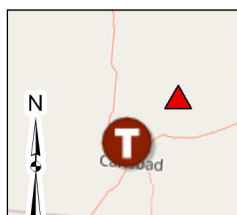
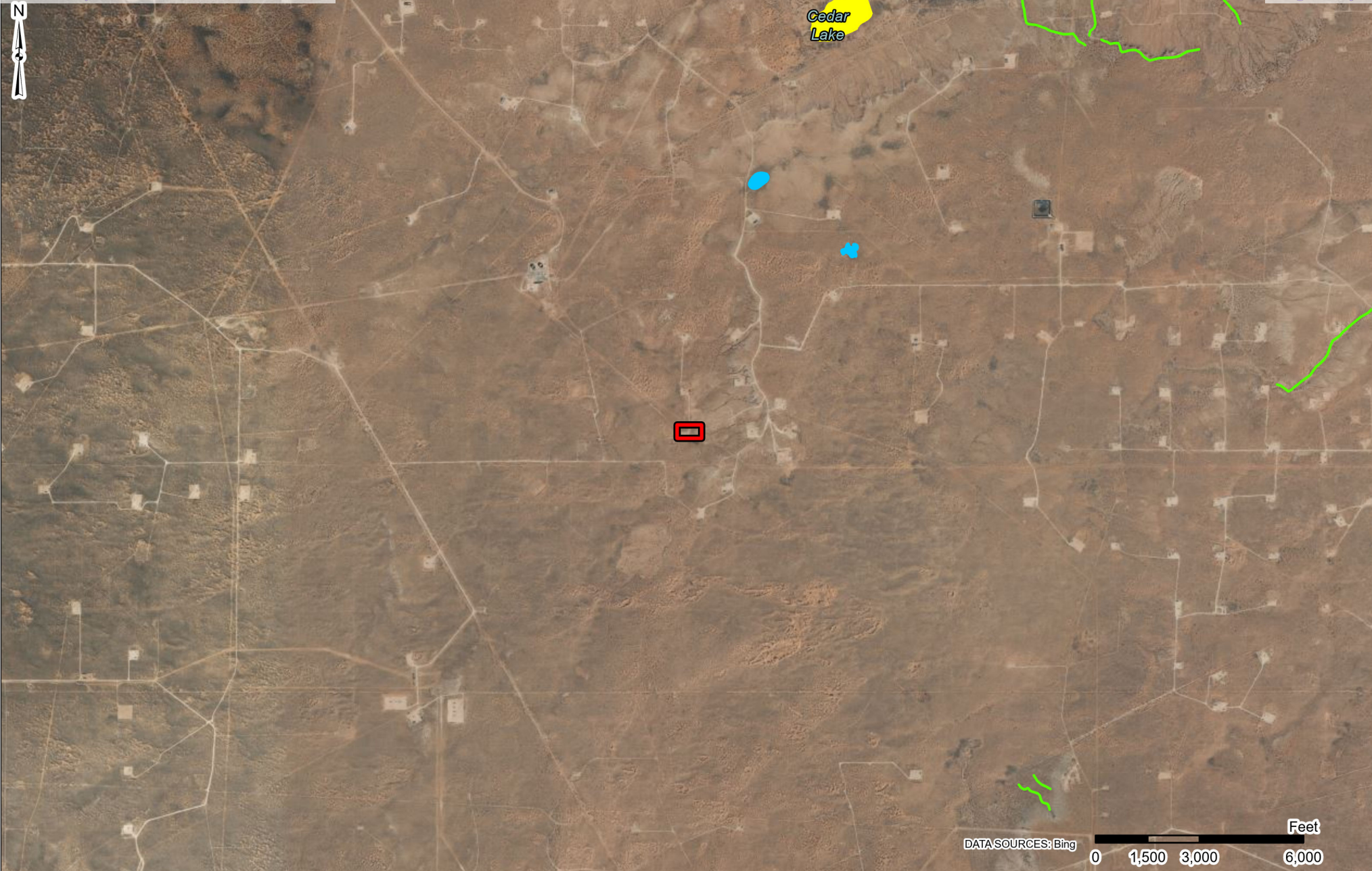
**NMOSE POD Location Map**

Cedar Breaks Walter Lake St. 1 6" Steel Line  
Durango  
32.772122°, -103.948648°

**Exhibit**

**4**





- Site Location
- Freshwater Emergent Wetland
- Freshwater Pond
- Lake
- Riverine

Project No.:  
KH237027

Date:  
Jun 13 2023

Drawn By:  
JWL

Reviewed By:  
TLC

**Terracon**

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Carlsbad, NM

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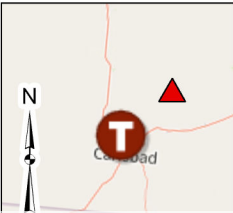
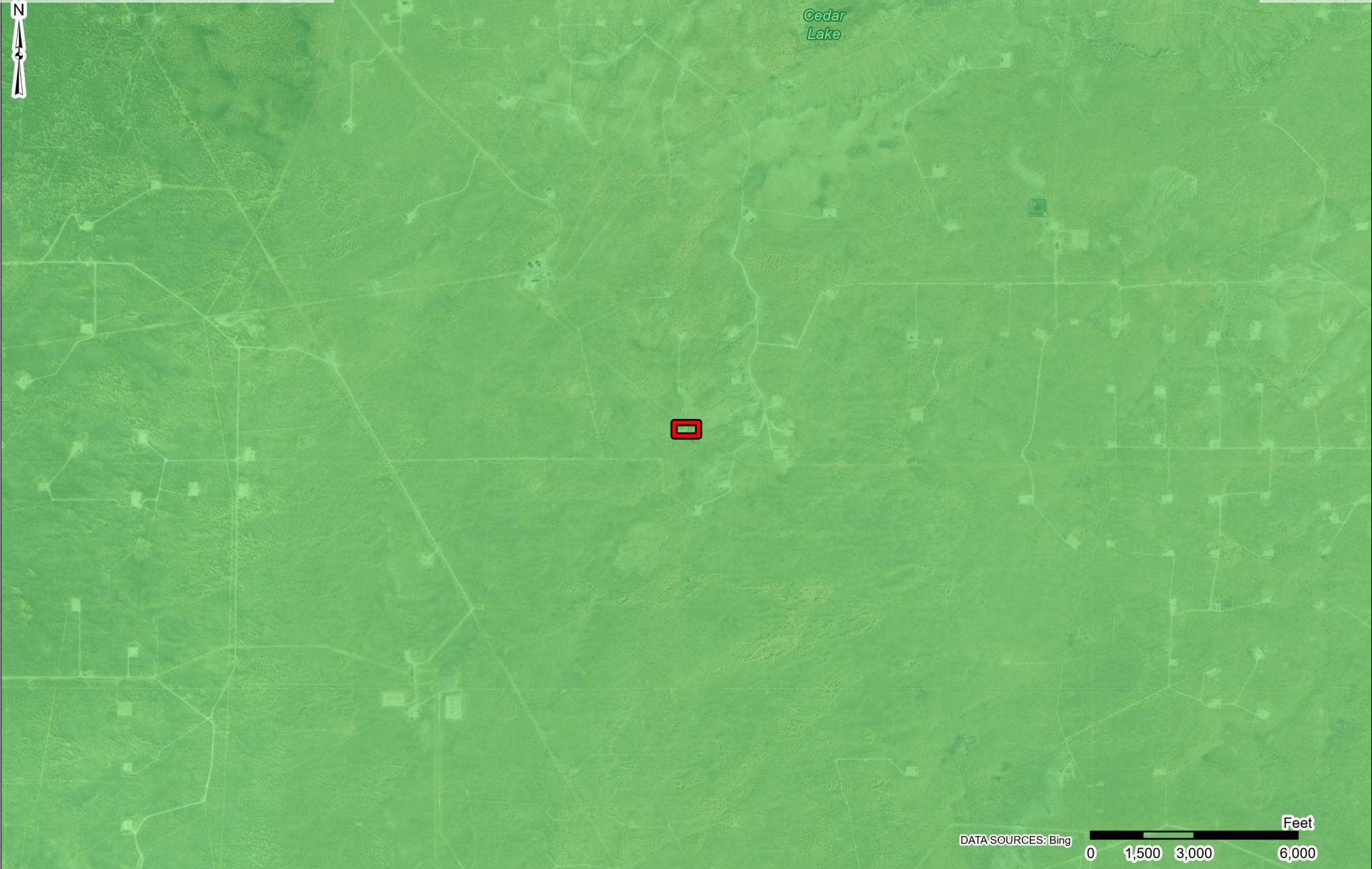
### Designated Wetland Map

Cedar Breaks Walter Lake St. 1 6" Steel Line  
Durango  
32.772122°, -103.948648°

### Exhibit

**5**






-  Site Location
- Karst Potential
-  Low
  -  Medium
  -  High

Project No.:  
KH237027

Date:  
Jun 13 2023

Drawn By:  
JWL

Reviewed By:  
TLC



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Carlsbad, NM

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**Cave Karst Public UCP Map**

Cedar Breaks Walter Lake St. 1 6" Steel Line  
Durango  
32.772122°, -103.948648°

**Exhibit**

**6**

## **APPENDIX B – TABLES AND WELL DATA**

TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS - BTEX <sup>1</sup> , Chloride <sup>2</sup> , and TPH <sup>3</sup> Cedar Breaks Walters Lake St. 1 6" Steel Line Terracon Project No. KH237027								
Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)		
						GRO	DRO	EXT DRO
Background Samples (Off Pad)								
BG 1	2'	Grab	03/28/23	<SLDs	672	<10.0	19.3	11.5
BG 2	2'	Grab	03/28/23	<SLDs	<16.0	<10.0	<10.0	<10.0
BG 3	2'	Grab	03/28/23	<SLDs	64.0	<10.0	17.4	<10.0
Confirmation Samples (Off Pad)								
FS-01	4'	Comp	03/28/23	<SLDs	96.0	<10.0	29.0	26.8
FS-02	4'	Comp	03/28/23	<SLDs	96.0	<10.0	30.2	<10.0
FS-03	8'	Comp	03/28/23	<SLDs	32.0	<10.0	<10.0	<10.0
E-SW-01	0-4'	Comp	03/28/23	<SLDs	80.0	<10.0	45.0	16.3
W-SW-01	0-4'	Comp	03/28/23	<SLDs	128	<10.0	14.1	<10.0
NMOCD Reclamation Standards <sup>4</sup> (Applicable for Soils from the Surface to 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	10,000	2,500		
NMOCD Remediation and Delineation Standards <sup>5</sup> (Applicable for Soils at Depths Greater than 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	10,000	2,500		

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/MRO)

4. New Mexico Administration Code (NMAC) Restoration, Reclamation, and Re-vegetation (19.15.29.13) New Mexico Administration Code (NMAC) – D (Reclamation of areas no longer in use) for soils extending to 4 ft. bgs

5. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards are proposed in 19.15.29.12 NMAC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed

N/A = Not Applicable

**Bold and Highlight denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOCD) Reclamation and/or Remediation and Delineation Standard**

TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS - BTEX <sup>1</sup> , Chloride <sup>2</sup> , and TPH <sup>3</sup> Cedar Breaks Walters Lake St. 1 6" Steel Line Terracon Project No. KH237027								
Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)		
						GRO	DRO	EXT DRO
W-SW-1.2	4-8'	Comp	03/28/23	<SLDs	192	<10.0	55.5	14.1
S-SW-01	0-4'	Comp	03/28/23	<SLDs	32.0	<10.0	29.7	<10.0
S-SW-02	0-4'	Comp	03/28/23	<SLDs	48.0	<10.0	19.0	<10.0
S-SW-03.1	0-4'	Comp	03/28/23	<SLDs	16.0	<10.0	<10.0	<10.0
S-SW-03.2	4-8'	Comp	03/28/23	<SLDs	80.0	<10.0	<10.0	<10.0
N-SW-01	0-4'	Comp	03/28/23	<SLDs	48.0	<10.0	<10.0	<10.0
N-SW-02	0-4'	Comp	03/28/23	<SLDs	32.0	<10.0	10.3	<10.0
N-SW-03.1	0-4'	Comp	03/28/23	<SLDs	16.0	<10.0	10.4	<10.0
N-SW-03.2	4-8'	Comp	03/28/23	<SLDs	112	<10.0	<10.0	<10.0
<b>NMOCD Reclamation Standards<sup>4</sup></b> (Applicable for Soils from the Surface to 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	10,000	2,500		
<b>NMOCD Remediation and Delineation Standards<sup>5</sup></b> (Applicable for Soils at Depths Greater than 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	10,000	2,500		

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/MRO)

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# New Mexico Office of the State Engineer

## Transaction Summary

### EXPL Permit To Explore

Transaction Number: 449198

Transaction Desc: RA 11590  
EXPLORATORY

File Date: 01/19/2010

Primary Status: PMT Permit





Secondary Status: APR Approved

Person Assigned: \*\*\*\*\*

Applicant: NEW MEXICO STATE LAND OFFICE

Contact: DALLAS RIPPY, ASST COMM OF RECR DIV

### Events

	Date	Type	Description	Comment	Processed By
	01/19/2010	APP	Application Received	*	*****
	01/22/2010	FTN	Finalize non-published Trans.		*****
	04/23/2010	LOG	Well Log Received	*	*****
	04/23/2010	LOG	Well Log Received	*	*****
	04/23/2010	LOG	Well Log Received	*	*****
	05/04/2010	DRY	Dry well log received		*****
	05/04/2010	DRY	Dry well log received		*****
	05/04/2010	DRY	Dry well log received		*****
	05/11/2010	QAT	Quality Assurance Completed	IMAGE	*****
	05/25/2010	QAT	Quality Assurance Completed	IMAGE/3 DRY WELL LOGS	*****

### Water Right Information

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
RA 11590	0	0		

#### \*\*Point of Diversion

RA 11590 POD1	603307	3628572	
RA 11590 POD2	603916	3628576	
RA 11590 POD4	603303	3629258	
RA 11590 POD3	603912	3629262	

### Remarks

"C-1 through C-4 will be installed to evaluate the subsurface. If groundwater is encountered, these wells will be completed as a monitoring well or piezometer. If converted to a well, will not be used for water consumption."

### Conditions

1A Depth of the well shall not exceed the thickness of the valley fill.

### Conditions

- 4 No water shall be appropriated and beneficially used under this permit.
- B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.
- C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.
- C2 No water shall be diverted from this well except for testing purposes which shall not exceed twenty (20) cumulative days, and well shall be plugged or capped on or before , unless a permit to use water from this well is acquired from the Office of the State Engineer.

---

### Action of the State Engineer

**\*\* See Image For Any Additional Conditions of Approval \*\***

**Approval Code:** A - Approved

**Action Date:** 01/22/2010

**PCW Due Date:** 01/31/2011

**State Engineer:** John R. D Antonio,



## **APPENDIX C – PHOTOGRAPHIC LOG**

Cedar Breaks Walter's Lake ■ Eddy County, New Mexico  
April 5, 2023 ■ Terracon Project No. KH227027



Terracon  
Cedar Break Walter's Lake  
West wall  
03/28/2023 09:30 AM  
32.77214, -103.94847 (±9ft)  
Altitude: 3461ft

**PHOTO 1:** View of area before excavation



Terracon  
Cedar Break Walter's Lake  
South Wall 3  
03/28/2023 09:31 AM  
32.77216, -103.94861 (±10ft)  
Altitude: 3462ft

**PHOTO 2:** View of South Wall before excavation

Responsive ■ Resourceful ■ Reliable



Cedar Breaks Walter's Lake ■ Eddy County, New Mexico  
April 5, 2023 ■ Terracon Project No. KH227027



Terracon  
Cedar Break Walter's Lake  
West Wall  
03.28.2023 12:57 PM  
32.77208, -103.94859 (±11ft)  
Altitude: 3450ft

**PHOTO 3:** View of West Wall after excavation



Terracon  
Cedar Break Walter's Lake  
South Wall  
03.28.2023 12:56 PM  
32.77211, -103.94864 (±14ft)  
Altitude: 3453ft

**PHOTO 4:** View of South Wall after excavation

Responsive ■ Resourceful ■ Reliable

## **APPENDIX D – ANALYTICAL REPORT AND CHAIN OF CUSTODY**



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

April 03, 2023

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: CEDAR BREAKS WALTERS

Enclosed are the results of analyses for samples received by the laboratory on 03/28/23 16:36.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 01 4' (H231420-01)**

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	2.01	100	2.00	1.23	
Toluene*	<0.050	0.050	03/30/2023	ND	2.04	102	2.00	1.32	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	2.06	103	2.00	0.797	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	6.24	104	6.00	0.734	
Total BTEX	<0.300	0.300	03/30/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/30/2023	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/30/2023	ND	227	114	200	5.79	
DRO >C10-C28*	29.0	10.0	03/30/2023	ND	230	115	200	5.86	
EXT DRO >C28-C36	26.8	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane 98.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 02 4' (H231420-02)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2023	ND	2.01	100	2.00	1.23		
Toluene*	<0.050	0.050	03/30/2023	ND	2.04	102	2.00	1.32		
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	2.06	103	2.00	0.797		
Total Xylenes*	<0.150	0.150	03/30/2023	ND	6.24	104	6.00	0.734		
Total BTEx	<0.300	0.300	03/30/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	03/30/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/30/2023	ND	227	114	200	5.79	
DRO >C10-C28*	30.2	10.0	03/30/2023	ND	230	115	200	5.86	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane 90.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.4 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 03 8' (H231420-03)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	2.01	100	2.00	1.23	
Toluene*	<0.050	0.050	03/30/2023	ND	2.04	102	2.00	1.32	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	2.06	103	2.00	0.797	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	6.24	104	6.00	0.734	
Total BTEx	<0.300	0.300	03/30/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/30/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/30/2023	ND	227	114	200	5.79	
DRO >C10-C28*	<10.0	10.0	03/30/2023	ND	230	115	200	5.86	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: E - SW - 01 0-4' (H231420-04)**

BTX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	2.01	100	2.00	1.23	
Toluene*	<0.050	0.050	03/30/2023	ND	2.04	102	2.00	1.32	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	2.06	103	2.00	0.797	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	6.24	104	6.00	0.734	
Total BTX	<0.300	0.300	03/30/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	03/30/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/30/2023	ND	227	114	200	5.79	
DRO >C10-C28*	45.0	10.0	03/30/2023	ND	230	115	200	5.86	
EXT DRO >C28-C36	16.3	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane 93.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W - SW - 01 0-4' (H231420-05)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	2.01	100	2.00	1.23	
Toluene*	<0.050	0.050	03/30/2023	ND	2.04	102	2.00	1.32	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	2.06	103	2.00	0.797	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	6.24	104	6.00	0.734	
Total BTEX	<0.300	0.300	03/30/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/30/2023	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/30/2023	ND	227	114	200	5.79	
DRO >C10-C28*	14.1	10.0	03/30/2023	ND	230	115	200	5.86	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane 97.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W - SW - 01.2 4-8' (H231420-06)**

BTX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	2.01	100	2.00	1.23	
Toluene*	<0.050	0.050	03/30/2023	ND	2.04	102	2.00	1.32	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	2.06	103	2.00	0.797	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	6.24	104	6.00	0.734	
Total BTX	<0.300	0.300	03/30/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	03/30/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/30/2023	ND	227	114	200	5.79	
DRO >C10-C28*	55.5	10.0	03/30/2023	ND	230	115	200	5.86	
EXT DRO >C28-C36	14.1	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BG 1 2' (H231420-07)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	2.01	100	2.00	1.23	
Toluene*	<0.050	0.050	03/30/2023	ND	2.04	102	2.00	1.32	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	2.06	103	2.00	0.797	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	6.24	104	6.00	0.734	
Total BTEx	<0.300	0.300	03/30/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	672	16.0	03/30/2023	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/30/2023	ND	227	114	200	5.79	
DRO >C10-C28*	19.3	10.0	03/30/2023	ND	230	115	200	5.86	
EXT DRO >C28-C36	11.5	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BG 2 2' (H231420-08)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	1.88	93.9	2.00	3.23	
Toluene*	<0.050	0.050	03/30/2023	ND	1.85	92.6	2.00	2.63	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.84	91.8	2.00	0.769	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.42	90.3	6.00	0.0711	
Total BTEx	<0.300	0.300	03/30/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 87.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/30/2023	ND	384	96.0	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/30/2023	ND	227	114	200	5.79	
DRO >C10-C28*	<10.0	10.0	03/30/2023	ND	230	115	200	5.86	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane 99.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BG 3 2' (H231420-09)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2023	ND	1.88	93.9	2.00	3.23		
Toluene*	<0.050	0.050	03/30/2023	ND	1.85	92.6	2.00	2.63		
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.84	91.8	2.00	0.769		
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.42	90.3	6.00	0.0711		
Total BTEx	<0.300	0.300	03/30/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.8 % 71.5-134

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	03/30/2023	ND	384	96.0	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/29/2023	ND	215	108	200	6.07	
DRO >C10-C28*	17.4	10.0	03/29/2023	ND	236	118	200	11.3	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 96.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S - SW - 01 0-4' (H231420-10)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2023	ND	1.88	93.9	2.00	3.23		
Toluene*	<0.050	0.050	03/30/2023	ND	1.85	92.6	2.00	2.63		
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.84	91.8	2.00	0.769		
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.42	90.3	6.00	0.0711		
Total BTX	<0.300	0.300	03/30/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.2 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/30/2023	ND	384	96.0	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/29/2023	ND	215	108	200	6.07	
DRO >C10-C28*	29.7	10.0	03/29/2023	ND	236	118	200	11.3	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 87.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S - SW - 02 0-4' (H231420-11)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2023	ND	1.88	93.9	2.00	3.23		
Toluene*	<0.050	0.050	03/30/2023	ND	1.85	92.6	2.00	2.63		
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.84	91.8	2.00	0.769		
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.42	90.3	6.00	0.0711		
Total BTX	<0.300	0.300	03/30/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/30/2023	ND	384	96.0	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/29/2023	ND	215	108	200	6.07	
DRO >C10-C28*	19.0	10.0	03/29/2023	ND	236	118	200	11.3	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 72.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S - SW - 03.1 0-4' (H231420-12)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2023	ND	1.88	93.9	2.00	3.23		
Toluene*	<0.050	0.050	03/30/2023	ND	1.85	92.6	2.00	2.63		
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.84	91.8	2.00	0.769		
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.42	90.3	6.00	0.0711		
Total BTX	<0.300	0.300	03/30/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/30/2023	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/29/2023	ND	215	108	200	6.07	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	236	118	200	11.3	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 87.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S - SW - 03.2 4-8' (H231420-13)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2023	ND	1.88	93.9	2.00	3.23		
Toluene*	<0.050	0.050	03/30/2023	ND	1.85	92.6	2.00	2.63		
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.84	91.8	2.00	0.769		
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.42	90.3	6.00	0.0711		
Total BTEx	<0.300	0.300	03/30/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	03/30/2023	ND	384	96.0	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/29/2023	ND	215	108	200	6.07	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	236	118	200	11.3	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 79.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: N - SW - 01 0-4' (H231420-14)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2023	ND	1.88	93.9	2.00	3.23		
Toluene*	<0.050	0.050	03/30/2023	ND	1.85	92.6	2.00	2.63		
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.84	91.8	2.00	0.769		
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.42	90.3	6.00	0.0711		
Total BTEx	<0.300	0.300	03/30/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.2 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	03/30/2023	ND	384	96.0	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/29/2023	ND	215	108	200	6.07	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	236	118	200	11.3	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 88.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: N - SW - 02 0-4' (H231420-15)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	1.88	93.9	2.00	3.23	
Toluene*	<0.050	0.050	03/30/2023	ND	1.85	92.6	2.00	2.63	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.84	91.8	2.00	0.769	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.42	90.3	6.00	0.0711	
Total BTX	<0.300	0.300	03/30/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/30/2023	ND	384	96.0	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/29/2023	ND	215	108	200	6.07	
DRO >C10-C28*	10.3	10.0	03/29/2023	ND	236	118	200	11.3	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 79.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: N - SW - 03.1 0-4' (H231420-16)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/31/2023	ND	1.88	93.9	2.00	3.23		
Toluene*	<0.050	0.050	03/31/2023	ND	1.85	92.6	2.00	2.63		
Ethylbenzene*	<0.050	0.050	03/31/2023	ND	1.84	91.8	2.00	0.769		
Total Xylenes*	<0.150	0.150	03/31/2023	ND	5.42	90.3	6.00	0.0711		
Total BTEx	<0.300	0.300	03/31/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 92.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/30/2023	ND	384	96.0	400	8.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/29/2023	ND	215	108	200	6.07	
DRO >C10-C28*	10.4	10.0	03/29/2023	ND	236	118	200	11.3	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 77.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 03/28/2023  
 Reported: 04/03/2023  
 Project Name: CEDAR BREAKS WALTERS  
 Project Number: KH237027  
 Project Location: DURANGO

Sampling Date: 03/28/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: N - SW - 03.2 4-8' (H231420-17)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/30/2023	ND	1.88	93.9	2.00	3.23		
Toluene*	<0.050	0.050	03/30/2023	ND	1.85	92.6	2.00	2.63		
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.84	91.8	2.00	0.769		
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.42	90.3	6.00	0.0711		
Total BTEx	<0.300	0.300	03/30/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 92.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	03/30/2023	ND	384	96.0	400	8.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/29/2023	ND	215	108	200	6.07	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	236	118	200	11.3	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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---

### Notes and Definitions

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

---

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Terracon				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>				
Project Manager: Joseph Guesnier				P.O. #:								
Address: 4518 W. Perice Street				Company: <u>Durango</u>								
City: Carlsbad				Attn: <u>Chad Frost</u>								
Phone #: 8065077057				Address:								
Fax #: _____				City:								
Project #: <u>KH237027</u>				State: _____ Zip: _____								
Project Name: <u>Cedar Breaks Walters</u>				State: _____ Zip: _____								
Project Location:				Phone #: _____								
Sample Name: <u>Gus Sanchez</u>				Fax #: _____								
FOR LAB USE ONLY												
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX		PRESERV.	SAMPLING					
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :
<u>H231420</u>	<u>FS-01</u>	<u>4'</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>2</u>	<u>FS-02</u>	<u>4'</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>3</u>	<u>FS-03</u>	<u>8'</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>4</u>	<u>E-SW-01</u>	<u>0-4'</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>5</u>	<u>W-SW-01</u>	<u>0-4'</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>6</u>	<u>W-SW-01.2</u>	<u>4-8'</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>7</u>	<u>B61</u>	<u>2'</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>8</u>	<u>B62</u>	<u>2'</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>
<u>9</u>	<u>B63</u>	<u>2'</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>

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Relinquished By: [Signature] Date: 3-28-23 Time: 16:36 Received By: [Signature] Date: 3-28-23 Time: 16:36

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Delivered By: (Circle One) Observed Temp. °C 6.0 Sample Condition Cool Intact CHECKED BY: (Initials) Y.P.

Sampler - UPS - Bus - Other: \_\_\_\_\_ Corrected Temp. °C \_\_\_\_\_

Turnaround Time: \_\_\_\_\_ Standard ✓ Rush ✓ Bacteria (only) ✓ Sample Condition Cool Intact Observed Temp. °C \_\_\_\_\_ Corrected Temp. °C \_\_\_\_\_

Thermometer ID #113 Correction Factor -0.5°C

REMARKS: joesph.guesnier@terracon.com; travis.casey@terracon.com; austin.worley@terracon.com; michael.adams@terracon.com; becksyue.miller@terracon.com; justin.friend@terracon.com; gus.sanchez@terracon.com

Verbal Result: ☐ Yes ☐ No Add'l Phone #: \_\_\_\_\_

All Results are emailed. Please provide Email address: \_\_\_\_\_

FORM-006 R.3.2 10/07/21

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





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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Terracon

Project Manager: Joseph Guesnier

Address: 4518 W. Perice Street

City: Carlsbad

State: NM Zip: 88220

Phone #: 8065077057

Fax #:

Project #: KH237027

Project Owner:

Project Name: Cedar Breaks Walters

Project Location:

Sampler Name: Gus Sanchez

FOR LAB USE ONLY

Lab I.D. Sample I.D.

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chloride (EPA M	TPH Extended 8	BTEX (EPA Meth																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Relinquished By:

Date: 3-28-23

Time: 16:36

Received By: [Signature]

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

Remarks: Joseph Guesnier@terracon.com; Travis Casey@terracon.com; Austin Worley@terracon.com; Michael Adams@terracon.com; Beckysue Miller@terracon.com; Justin Friend@terracon.com; gus.sanchez@terracon.com

Relinquished By:

Date:

Time:

Received By:

Turnaround Time:

Standard Rush

Bacteria (only) Sample Condition

Cool Intact Observed Temp. °C

Delivered By: (Circle One)

Observed Temp. °C

Corrected Temp. °C

Sample Condition

CHECKED BY: (Initials)

Thermometer ID #113

Correction Factor -0.5°C

Cool Intact

Observed Temp. °C

Corrected Temp. °C

Sampler - UPS - Bus - Other:

Corrected Temp. °C

Cool Intact

Observed Temp. °C

Corrected Temp. °C

Thermometer ID #113

Correction Factor -0.5°C

Cool Intact

Observed Temp. °C

Corrected Temp. °C

FORM-006 R.3.2 10/07/21

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

## **APPENDIX E – INITIAL C-141 AND FINAL C-141**

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

State of New Mexico  
Energy Minerals and Natural  
Resources 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	nAPP2303731028
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Frontier Field Services, LLC	OGRID 221115
Contact Name Amber Groves	Contact Telephone 575-703-7992
Contact email <a href="mailto:agroves@durangomidstream.com">agroves@durangomidstream.com</a>	Incident # (assigned by OCD)
Contact mailing address 47 Conoco Rd, Maljamar NM 88264	

### Location of Release Source

Latitude 32.772122 Longitude -103.948648  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Cedar Breaks Walters Lake St 1 6" Steel Line	Site Type Pipeline
Date Release Discovered 2/4/2023	API# (if applicable)

Unit Letter	Section	Township	Range	County
M	2	18S	30E	Eddy

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls) 1	Volume Recovered (bbls) 0
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf) 156.95	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release  
External & Internal corrosion.

## Oil Conservation Division

Incident ID	nAPP2303731028
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?

**Initial Response**

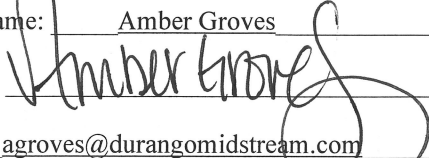
*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

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

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

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

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

Printed Name: Amber Groves Title: Senior Environmental Specialist  
Signature:  Date: 2/6/2023  
email: agroves@durangomidstream.com Telephone: (575)703-7992

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_





## Gas Volume Release Report

Gas Release Volume Calculator		
Date:	2/4/2023	
Site or Line Name:	MAL-Cedar Breaks Walters Lake St1 6" Steel Line LP	
Area of Hole in Pipe:	0.25	square inches
Absolute Pressure:	83.5	psia - absolute pressure (psia = psig gauge pressure + 14.7)
Duration of Release:	60.00	minutes
Actual Temperature:	67.2	Degrees F
Representative Gas Analysis	Please attach or email a representative gas analysis	
<b>Constants</b>		
Temperature at standard conditions:	60	Deg. F
Pressure at standard conditions:	14.7	PSIA
Volume of Gas - ACF	28.01	MACF
Volume of Gas - SCF	156.95	MSCF
<b>Notes</b>		
Entered by user		
Calculated Value		
Constant		



## Liquid Volume Release Report

Liquid Release Volume Calculator								
Date:	2/4/2023							
Site or Line Name:	MAL-Cedar Breaks Walters Lake St1 6" Steel Line LP							
Soil Type	Porosity	Length	Width	Depth (.083 per inch)	Cubic Feet	Estimated Barrels	Soil Type	
Clay	0.15				0	0.00	Clay	
Sandy Clay	0.12				0	0.00	Sandy Clay	
Silt	0.16				0	0.00	Silt	
Fine Sand	0.16				0	0.00	Fine Sand	
Medium Sand	0.25	16.4	16.5	0.083	22.4598	1.00	Medium Sand	
Coarse Sand	0.26				0	0.00	Coarse Sand	
Gravelly Sand	0.26				0	0.00	Gravelly Sand	
Fine Gravel	0.26				0	0.00	Fine Gravel	
Medium Gravel	0.20				0	0.00	Medium Gravel	
Coarse Gravel	0.18				0	0.00	Coarse Gravel	
Sandstone	0.25				0	0.00	Sandstone	
Siltstone	0.18				0	0.00	Siltstone	
Limestone	0.13				0	0.00	Limestone	
Basalt	0.19				0	0.00	Basalt	
Standing Liquids	X	0	0	0	0	0.00	Standing Liquids	

Choose the one prevailing ground type for estimating spill volumes at a single location. Standing liquids are figured separately using the green cell.

Note that the depth should be measured in feet and tenths of feet (1 inch = .083)

$$\text{Cubic Feet} = L \times W \times D$$

$$\text{Estimated Barrels} = ((\text{Cubic Feet} \times \text{Porosity}) / 5.61)$$



Incident ID	nAPP2303731028
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?	<u>&gt;55</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

## Oil Conservation Division

Incident ID	nAPP2303731028
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: Lupe Carrasco Title: Sr. Environmental Specialist

Signature: Lupe Carrasco Date: 6/23/23

email: gcarrasco@durangomidstream.com Telephone: 575-725-0787

**OCD Only**

Received by: Shelly Wells Date: 6/23/2023



Incident ID	nAPP2303731028
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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Printed Name: Lupe Carrasco Title: Sr. Environmental Specialist  
Signature: Lupe Carrasco Date: 6/23/23  
email: gcarrasco@durangomidstream.com Telephone: 575-725-0787

**OCD Only**

Received by: Shelly Wells Date: 6/23/2023

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	nAPP2303731028
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: Lupe Carrasco Title: Sr. Environmental Specialist  
Signature: \_\_\_\_\_ Date: 6/23/23  
email: gcarrasco@durangomidstream.com Telephone: 575-725-0787

**OCD Only**

Received by: Shelly Wells Date: 6/23/2023

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: 11/29/2023  
Printed Name: Ashley Maxwell Title: Environmental Specialist

## APPENDIX F – TERRACON STANDARD OF CARE, LIMITATION, AND RELIANCE

### Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, Durango Midstream LLC, as reflected in our proposal (PKH227021).

### Additional Scope Limitations

The development of this Amended RAP is based upon information provided by the Client and Terracon's remediation and construction services line. Such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those by information provided by the Client. The data, interpretations, findings, and recommendations are based solely upon reformation executed within the scope of these services.

### Reliance

This report has been prepared for the exclusive use of Durango Midstream LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Durango Midstream LLC and Terracon. Any unauthorized distribution or reuse is at Durango Midstream LLC sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and Durango Midstream LLC and Terracon's Master Services Agreement. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to Durango Midstream LLC and all relying parties unless otherwise agreed in writing.

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

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

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

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

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

CONDITIONS  
  
Action 232140

CONDITIONS

Operator: FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID: 221115
	Action Number: 232140
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	11/29/2023