Terracon
4518 W. Pierce St. Carlsbad NM, 88220

July 7, 2024
Walsh & Watts, Inc.
155 Walsh Drive
Aledo, TX, 76008

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

RE: **Amended Closure Report**
Cochise 2 State #004
Unit G, Section 02, Township 19 South, Range 32 East
32.692152°, -103.7347785°
Lea County, New Mexico
NMOCD Incident No. NOY1728952379
Terracon Project No. KH247026

To Whom It May Concern:

Terracon Consultants, Inc. (Terracon) is submitting this Amended Closure Report on behalf of Walsh & Watts Inc. (Walsh & Watts) for the above-referenced site. Prepared in line with New Mexico Oil Conservation Division (NMOCD) regulations, this report addresses the clean-up actions following the release of oil and produced water due to a failed/ruptured flow line discovered on October 12, 2017, and reported on October 16, 2017, NMOCD Incident No. NOY1728952379. Detailed assessment and remedial actions by Terracon are outlined in the following sections.

Action Items

Completed Actions

1) The Energy, Mineral and Natural Resources Department (EMNRD) response to the previous closure report submitted by Tetra Tech dated November 27, 2017, via email dated February 6, 2018, indicated that Laboratory analysis of sidewall/edge samples are required for confirmation of complete remediation for 1RP-4845. The email correspondence is included as Appendix C and the Tetra Tech closure report is included in Appendix D.
2) Terracon collected four sidewall confirmation samples on June 4, 2024.
3) Maps and associated data for approval have been provided.
4) Soil samples collected from the site were submitted to an approved laboratory for analysis to determine levels of constituents horizontally in the four locations identified by the EMNRD.
5) Confirmation samples were collected at the inferred release area from four sidewall locations.

Anticipated Actions

1) Approval by the NMOCD.

Site Information

The Notice of the Release was provided to the EMNRD District 1 Hobbs, New Mexico Office by Doug Keathley on October 13, 2017, and subsequently approved on October 16, 2017 (EMNRD Reference ID: NOY1728952379). The site is located within Unit G, Section 2, Township 19 South, Range 32 East, approximately 11.20 miles South of Maljamar, New Mexico. A Topographical Map and Site Location Map is included as Exhibit 1 and Exhibit 2, respectively.

Regulatory Criteria

A review of data from the New Mexico Office of the State Engineer (NMOSE) website identified a water well (CP-00812) located 1.36 miles northeast of the site as indicated in the NMOSE Pod Location Map (Appendix A, Exhibit 3). This groundwater well was completed to a depth of 200 feet below ground surface (bgs) in 1965, depth to water was not noted. A review of the U.S. Fish and Wildlife Service, National Wetlands Inventory website indicates no wetland area is located within 5 miles of the site as indicated in the Designated Wetland Area Map (Appendix A, Exhibit 4). A review of geospatial data obtained from the BLM Carlsbad Field Office website indicated that the site is within an area of low risk for Karst formations, as indicated in the Cave Karst Public UCP Map (Appendix A, Exhibit 5).

Reclamation Standards

Per New Mexico Administrative Code (NMAC) 19.15.29.12, the closure criteria for the site are based on the remedial requirements for an off-pad release consisting of the removal of the affected soil from the surface to 4-feet below grade surface (bgs). The closure criteria are 50 mg/kg for Total Benzene, Toluene, Ethylbenzene and Xylenes (Total BTEX)(EPA Method 8021B), 10 mg/kg for Benzene (EPA Method 8021B), 10,000 mg/kg for Chlorides (EPA Method 300), 2,500 mg/kg for Total Petroleum Hydrocarbons (Total TPH) (EPA Method 8015M), and 1,000 mg/kg combined Gas Range Organics (GRO) Diesel Range Organics (DRO)(EPA Method 8015M).

Confirmation/Closure Activities

The inferred release area based on the Tetra Tech report was estimated at 1,250 square feet. A total of 4 composite wall confirmation soil samples (N-SW-01, E-SW-01, S-SW-01 AND W-SW-01) were collected at a depth of 0.5 feet bgs on June 4, 2024, and submitted for analysis of BTEX, Chloride and TPH. Confirmation sample results for BTEX, Chloride and TPH were below applicable NMOCD closure criteria. A Confirmation Sample Location Map in included in Appendix A, Exhibit 6 and confirmation sample results are provided in Appendix B, Table 1.

Conclusion

In accordance with NMAC 19.15.29.12, remediation of the impacted material is complete, and Walsh & Watts respectfully requests closure of the incident NOY1728952379 that occurred at the Cochise 2 State #004 location.

We at Terracon are deeply grateful for the opportunity to offer our environmental services to Walsh & Watts Inc. We are committed to providing the highest level of service and support. Should you need further information or have any queries, we encourage you to reach out to our office at your earliest convenience.

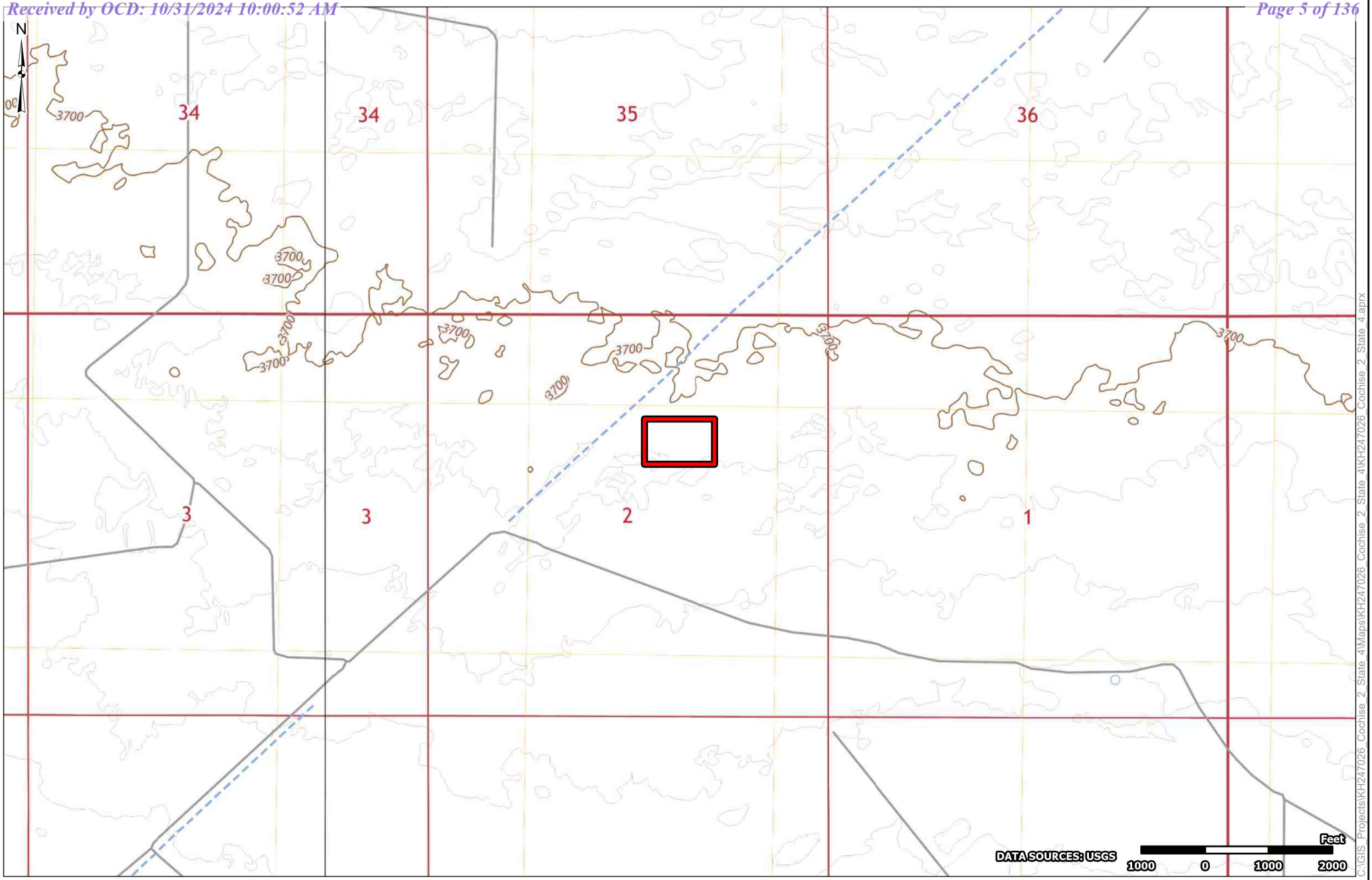
Sincerely,

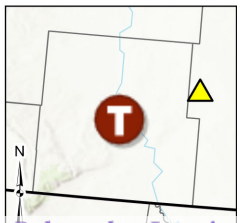
Prepared by:	Reviewed by:
Charles F Smith	**John Grams, P.G. (TX)**
Senior Consultant	Environmental Department Manager
Carlsbad	Lubbock

Attachments:

- **C-141 Summary Sheet**
- **Appendix A - Exhibits**
  - Exhibit 1 - Site Sample Location Map
  - Exhibit 2 - Site Location Map
  - Exhibit 3 - Pod Location Map
  - Exhibit 4 - Designated Wetland Area Map
  - Exhibit 5 - Cave Karst Public UCP Map
  - Exhibit 6 - Confirmation Sample Location Map
- **Appendix B - Tables and Well Data**
  - Table 1 - Confirmation Sample Results
- **Appendix C - EMNRD Closure Denial Email Correspondence**
- **Appendix D - Tetra Tech Closure Report**
- **Appendix E - Terracon Standard of Care, Limitation, and Reliance**

APPENDIX A – EXHIBITS





Site Boundary

Project No.:	KH247026
Date:	Jun 12 2024
Drawn By:	JWL
Reviewed By:	JRG

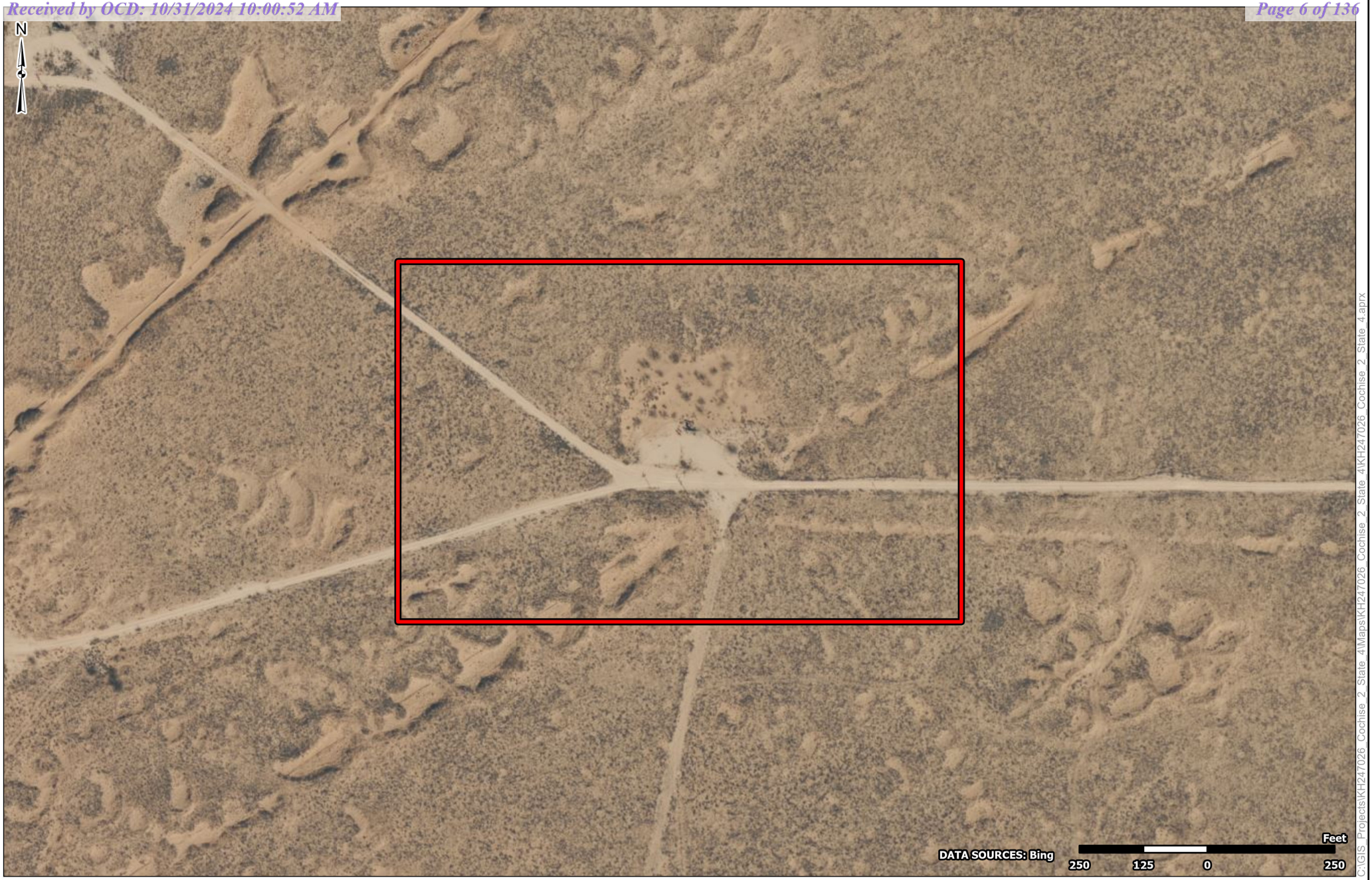
terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

Topographic Map

Cochise 2 State 4
Walsh and Watts, Inc.
32.69215, -103.73478
Lea County, New Mexico

Exhibit

1



Site Boundary

Project No.:	KH247026
Date:	Jun 12 2024
Drawn By:	JWL
Reviewed By:	JRG

terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

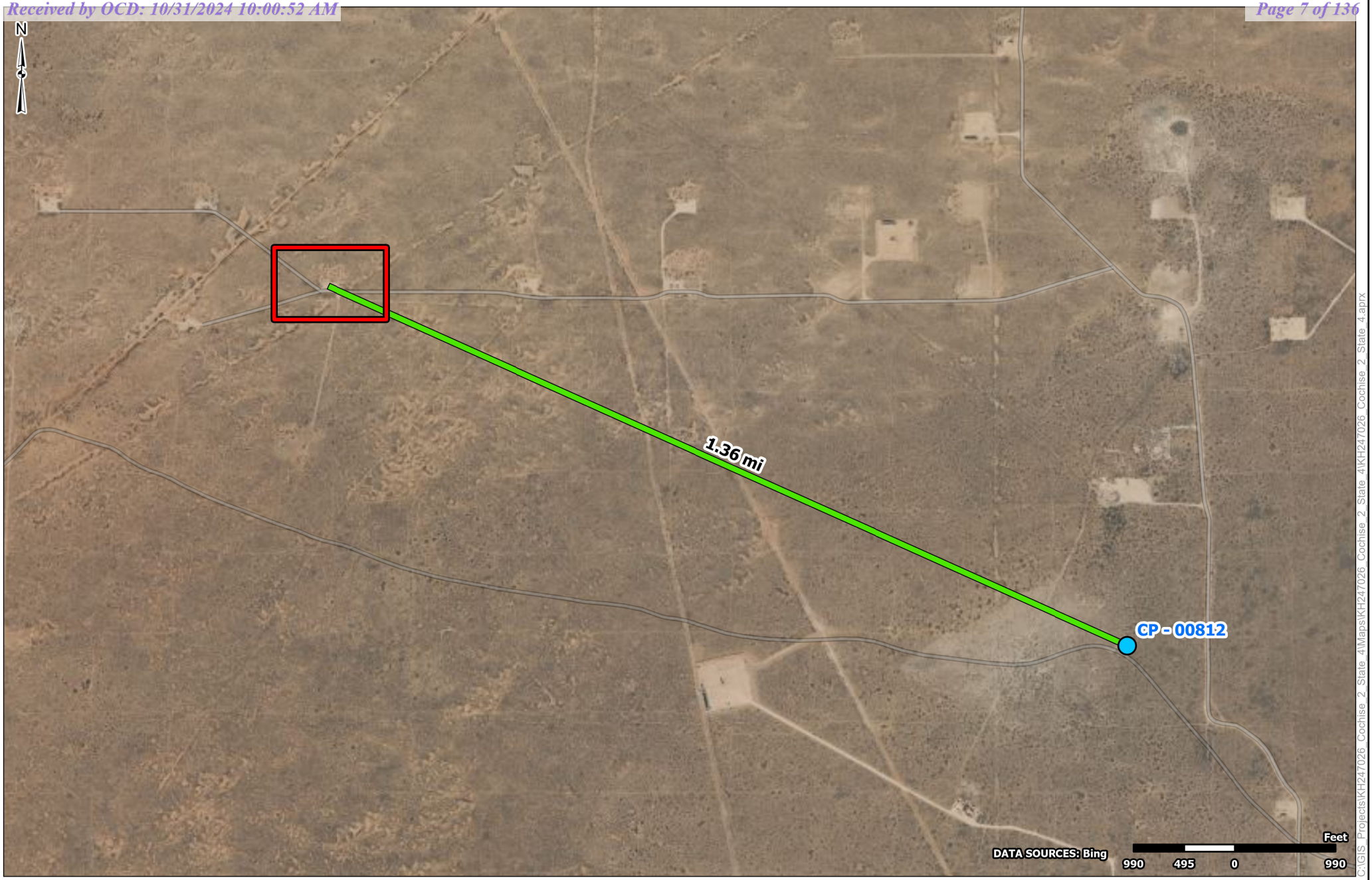
Site Location Map

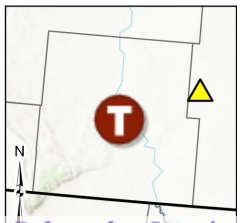
Cochise 2 State 4
Walsh and Watts, Inc.
32.69215, -103.73478
Lea County, New Mexico

Exhibit

2

C:\GIS_Projects\KH247026_Cochise_2_State_4\Maps\KH247026_Cochise_2_State_4\KH247026_Cochise_2_State_4.aprx





Site Boundary

NMOSE POD Location

Project No.:	KH247026
Date:	Jun 12 2024
Drawn By:	JWL
Reviewed By:	JRG

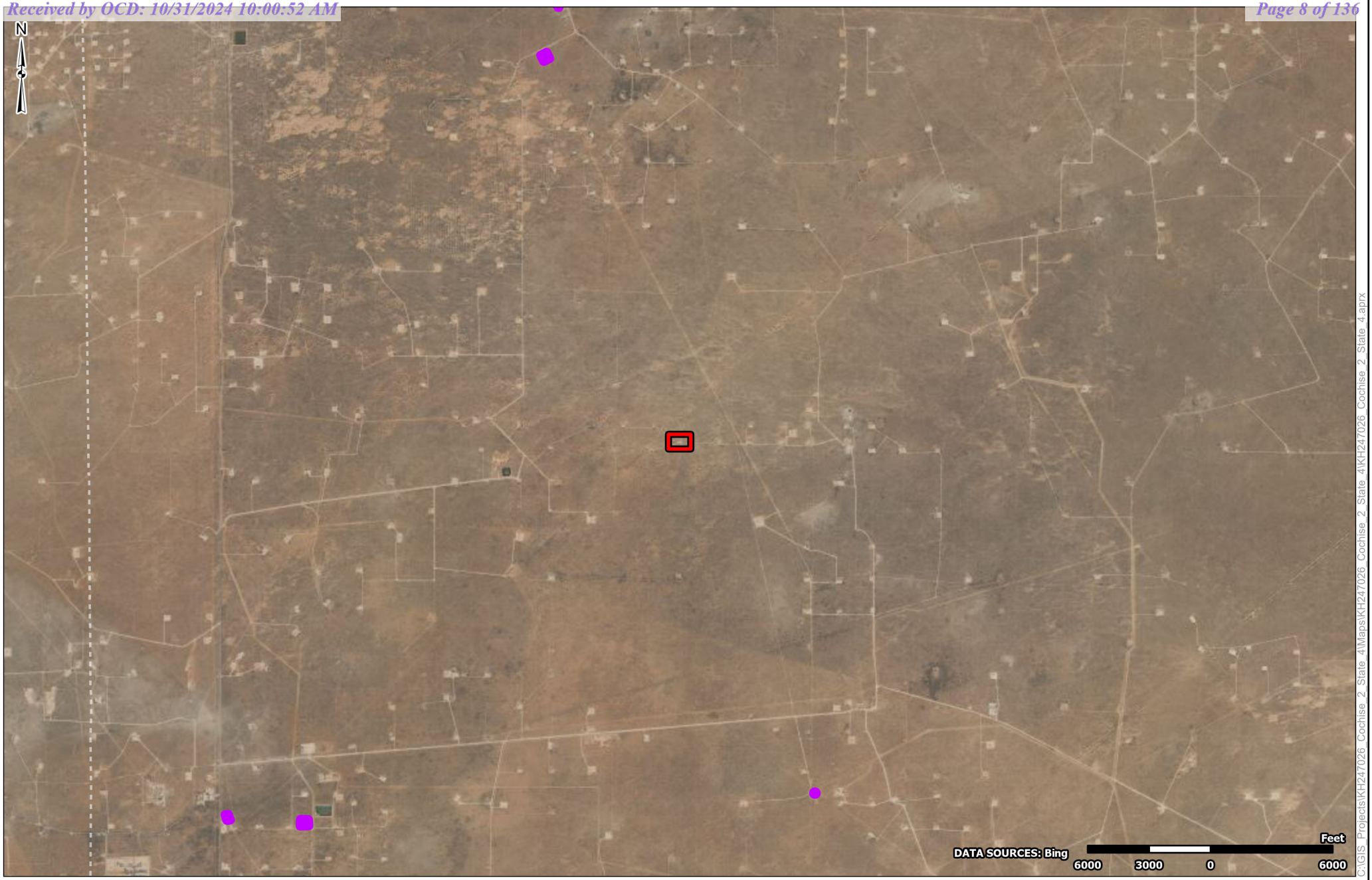
terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

NMOSE POD Location Map

Cochise 2 State 4
Walsh and Watts, Inc.
32.69215, -103.73478
Lea County, New Mexico

Exhibit

3



Site Boundary

Freshwater Pond

Project No.:	KH247026
Date:	Jun 12 2024
Drawn By:	JWL
Reviewed By:	JRG

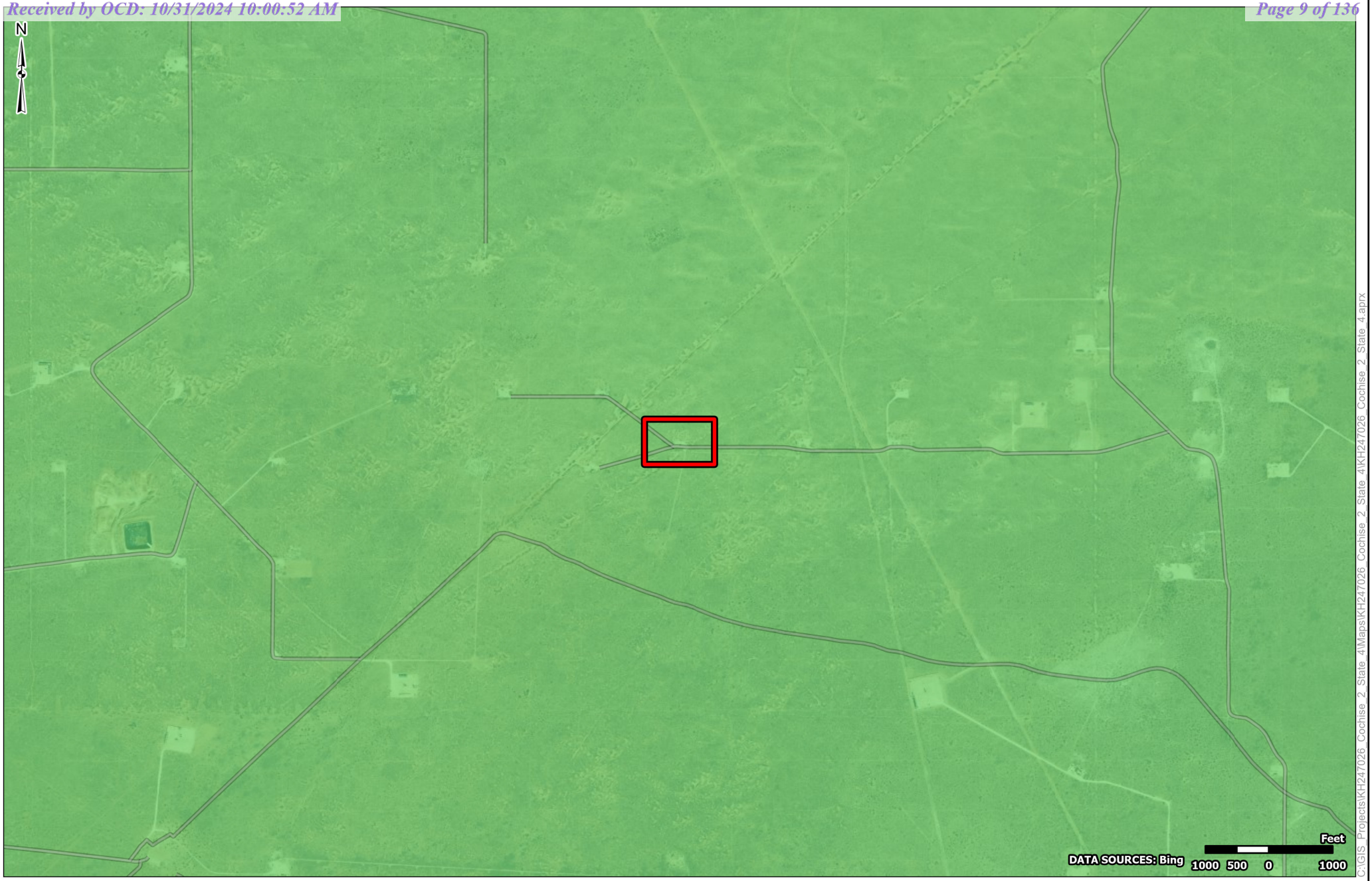
terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

Designated Wetland Area Map

Cochise 2 State 4
Walsh and Watts, Inc.
32.69215, -103.73478
Lea County, New Mexico

Exhibit

4



Site Boundary

Karst Potential

Low

Medium

High

Project No.:	KH247026
Date:	Jun 12 2024
Drawn By:	JWL
Reviewed By:	JRG

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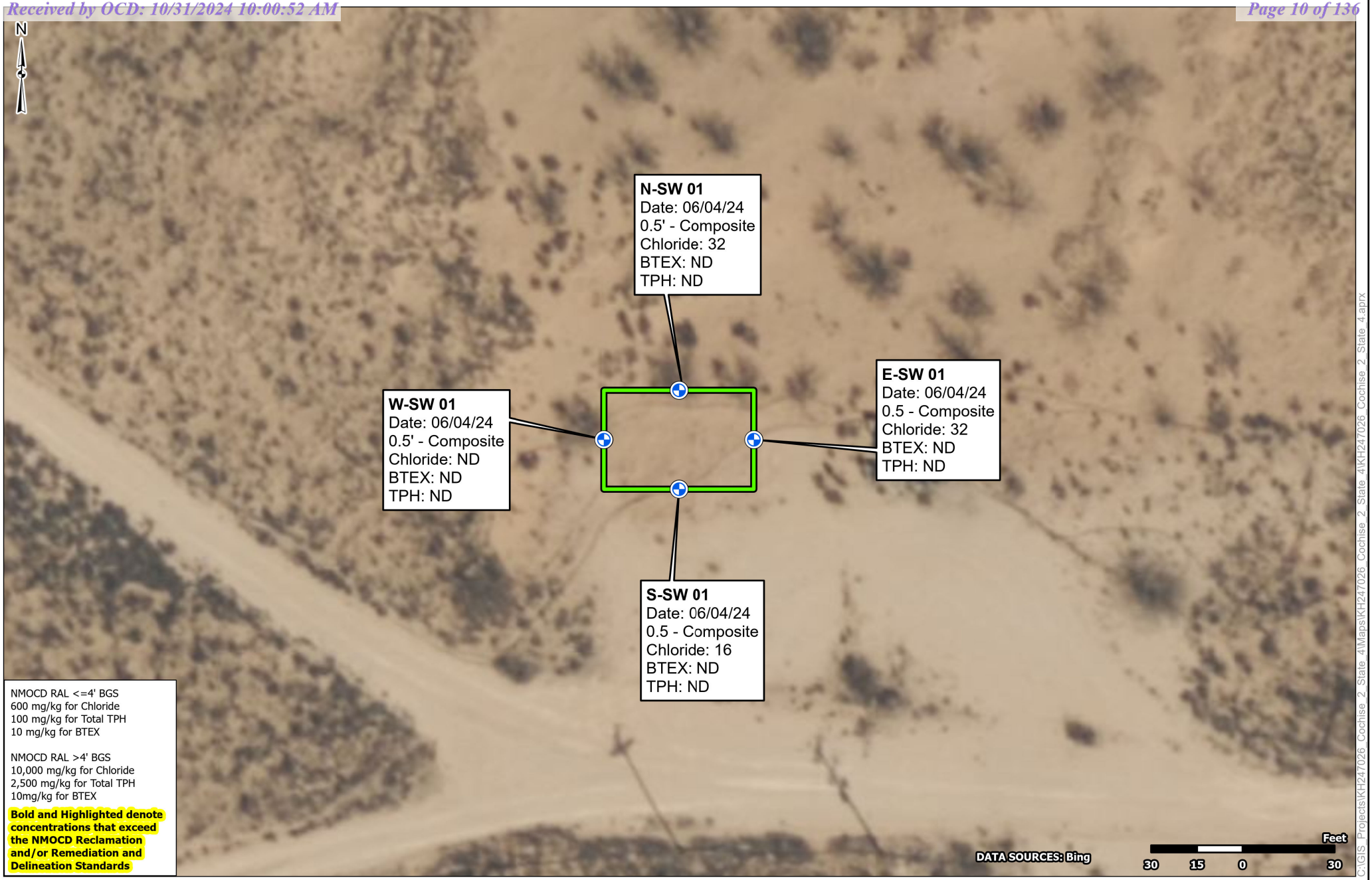
Cave Karst Public UCP Map

Cochise 2 State 4
Walsh and Watts, Inc.
32.69215, -103.73478
Lea County, New Mexico

Exhibit

5

C:\GIS_Projects\KH247026_Cochise_2_State_4\Maps\KH247026_Cochise_2_State_4\KH247026_Cochise_2_State_4.aprx



NMOCD RAL <=4' BGS
600 mg/kg for Chloride
100 mg/kg for Total TPH
10 mg/kg for BTEX

NMOCD RAL >4' BGS
10,000 mg/kg for Chloride
2,500 mg/kg for Total TPH
10mg/kg for BTEX

Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards

Confirmation Sample

Release Area (1,250 Sq Ft)

Project No.:	KH247026
Date:	Jun 12 2024
Drawn By:	JWL
Reviewed By:	JRG

terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

Confirmation Sample Location Map

Cochise 2 State 4
Walsh and Watts, Inc.
32.69215, -103.73478
Lea County, New Mexico

Exhibit

6

APPENDIX B – TABLES AND WELL DATA

Table 1
Soil Analytical Results Summary - Confirmation Samples
Project Code: KH247026
NMOCD Incident No. NOY1728952379

Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX[1] (mg/Kg)	Total TPH[2] (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
					EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
Release Assesment											
N-SW-01	6/4/2024	0.5	Comp		32	ND	ND	ND	ND	ND	ND
E-SW-01	6/4/2024	0.5	Comp		32	ND	ND	ND	ND	ND	ND
S-SW-01	6/4/2024	0.5	Comp		16	ND	ND	ND	ND	ND	ND
W-SW-01	6/4/2024	0.5	Comp		ND	ND	ND	ND	ND	ND	ND
NMOCD Reclamation Standards[3] (Surface to 4 ft bgs)					600	10	10	100	100	100	
NMOCD Remediation Standards[4] (Greater than Depths of 4 ft bgs)					10,000	10	10	2,500	2500	1,000	

1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes
2. TPH = Total petroleum hydrocarbons
3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegatation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs
4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 8/14/2018

ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL).
NA = Not Analyzed
Bold denotes concentrations above applicable laboratory SDLs.
Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.
In-situ = Sample is representative of material which remains in-place at the site.
Excavated = Sample is representative of materials which was excavated and disposed of at a permited disposal facility.

CARDINAL Laboratories

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

June 07, 2024

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: COCHISE 2 STATE 4

Enclosed are the results of analyses for samples received by the laboratory on 06/04/24 14:32.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/04/2024	Sampling Date:	06/04/2024
Reported:	06/07/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH237026	Sample Received By:	Alyssa Parras
Project Location:	WALSH & WATTS - EDDY CO		

Sample ID: N - SW 01 0.5' (H243148-01)

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	06/06/2024	ND	1.83	91.4	2.00	4.38	
Toluene*	<0.050	0.050	06/06/2024	ND	1.94	97.1	2.00	5.10	
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.15	108	2.00	9.98	
Total Xylenes*	<0.150	0.150	06/06/2024	ND	6.58	110	6.00	10.8	
Total BTEX	<0.300	0.300	06/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *124 %* *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	**32.0**	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/05/2024	ND	223	111	200	4.11	
DRO >C10-C28*	<10.0	10.0	06/05/2024	ND	199	99.4	200	4.55	
EXT DRO >C28-C36	<10.0	10.0	06/05/2024	ND					

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

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/04/2024	Sampling Date:	06/04/2024
Reported:	06/07/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH237026	Sample Received By:	Alyssa Parras
Project Location:	WALSH & WATTS - EDDY CO		

Sample ID: E - SW 01 0.5' (H243148-02)

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	06/06/2024	ND	1.83	91.4	2.00	4.38	
Toluene*	<0.050	0.050	06/06/2024	ND	1.94	97.1	2.00	5.10	
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.15	108	2.00	9.98	
Total Xylenes*	<0.150	0.150	06/06/2024	ND	6.58	110	6.00	10.8	
Total BTEX	<0.300	0.300	06/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/05/2024	ND	223	111	200	4.11	
DRO >C10-C28*	<10.0	10.0	06/05/2024	ND	199	99.4	200	4.55	
EXT DRO >C28-C36	<10.0	10.0	06/05/2024	ND					

Surrogate: 1-Chlorooctane *92.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *102 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/04/2024	Sampling Date:	06/04/2024
Reported:	06/07/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH237026	Sample Received By:	Alyssa Parras
Project Location:	WALSH & WATTS - EDDY CO		

Sample ID: S - SW 01 0.5' (H243148-03)

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	06/06/2024	ND	1.83	91.4	2.00	4.38	
Toluene*	<0.050	0.050	06/06/2024	ND	1.94	97.1	2.00	5.10	
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	2.15	108	2.00	9.98	
Total Xylenes*	<0.150	0.150	06/06/2024	ND	6.58	110	6.00	10.8	
Total BTEX	<0.300	0.300	06/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *117 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/05/2024	ND	223	111	200	4.11	
DRO >C10-C28*	<10.0	10.0	06/05/2024	ND	199	99.4	200	4.55	
EXT DRO >C28-C36	<10.0	10.0	06/05/2024	ND					

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

Surrogate: 1-Chlorooctadecane *111 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	06/04/2024	Sampling Date:	06/04/2024
Reported:	06/07/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH237026	Sample Received By:	Alyssa Parras
Project Location:	WALSH & WATTS - EDDY CO		

Sample ID: W - SW 01 0.5' (H243148-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/06/2024	ND	1.71	85.6	2.00	3.04	
Toluene*	<0.050	0.050	06/06/2024	ND	1.80	90.0	2.00	1.69	
Ethylbenzene*	<0.050	0.050	06/06/2024	ND	1.88	94.0	2.00	1.88	
Total Xylenes*	<0.150	0.150	06/06/2024	ND	5.67	94.5	6.00	1.93	
Total BTEX	<0.300	0.300	06/06/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *123 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/05/2024	ND	223	111	200	4.11	
DRO >C10-C28*	<10.0	10.0	06/05/2024	ND	199	99.4	200	4.55	
EXT DRO >C28-C36	<10.0	10.0	06/05/2024	ND					

Surrogate: 1-Chlorooctane *94.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *105 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Terracon
Project Manager: Joe Guesnier
Address: 4526 W. Pierce Street
City: Carlsbad
State: NM Zip: 88220
Phone #: 5756895949 Fax #:
Project #: KH2470 26 Project Owner: Walsh & Watts
Project Name: Cochise 2 State 4
Project Location: Eddy
Sampler Name: Becky Sue Meadows

BILL TO:
P.O. #:
Company: Walsh & Watts
Attn:
Address:
City:
State:
Phone #:
Fax #:

FOR LAB USE ONLY

Lab I.D.: H243148

Lab I.D.	Sample I.D.	Depth	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATE	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chloride (EPA Method4500)	TPH Extended 8015	BTEX (EPA Method 8021B)
1	N-SW 01	0.5'	C	1			X					X		6/4/2024	1300	X	X	X
2	E-SW 01	0.5'	C	1			X					X		6/4/2024	1302	X	X	X
3	S-SW 01	0.5'	C	1			X					X		6/4/2024	1304	X	X	X
4	W-SW 01	0.5'	C	1			X					X		6/4/2024	1306	X	X	X

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

Relinquished By: BMeadows Date: 6.4.24 Time: 1432 Received By:

Relinquished By: Date: Time: Received By:

Delivered By: (Circle One) Courier - UPS - Bus - Other:

Observed Temp. °C 0.1 Corrected Temp. °C

Sample Condition: Cool Yes / Intact Yes

CHECKED BY: (Initials) AP

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

All Results are emailed. Please provide Email address:

REMARKS:
joesph.guesnier@terracon.com;travis.casey@terracon.com;chuck.smith@terracon.com;beckysue.miller@terracon.com
gus.sanchez@terracon.com

Turnaround Time: Standard ☐ Rush ☐ AP 6.4.24

Thermometer ID #113 Correction Factor -0.5°C #1402

Bacteria (only) Sample Condition: Cool ☐Yes ☐No Intact ☐Yes ☐No

Observed Temp. °C

Corrected Temp. °C

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

006 R 3.2 10/07/21

From: Yu, Olivia, EMNRD
To: "Gonzales, Clair"; Naranjo, Mark
Cc: Nelson Patton; doug@saberogv.com; Tavarez, Ike
Subject: RE: Saber Oil & Gas - Cochise 2 State 4 Closure Request (1RP-4845)
Date: Tuesday, February 6, 2018 4:05:00 PM

Ms. Gonzales:

Laboratory analyses of sidewall/edge samples are required for confirmation of complete remediation for 1RP-4845.

Thanks,
Olivia

From: Gonzales, Clair [mailto:Clair.Gonzales@tetratech.com]
Sent: Monday, February 5, 2018 9:01 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: Nelson Patton <nelson@saberogv.com>; doug@saberogv.com; Tavarez, Ike <Ike.Tavarez@tetratech.com>
Subject: RE: Saber Oil & Gas - Cochise 2 State 4 Closure Request (1RP-4845)

Ms. Yu,

The area is currently excavated to 1.0' below surface and has not been backfilled, pending your approval. No sidewall samples were collected as the surface footprint was visibly well defined.

Let me know if you have any other questions or concerns.

Thank you,

Clair Gonzales
Clair Gonzales | **Project Manager**
Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946
clair.gonzales@tetratech.com

Tetra Tech | Complex World, CLEAR SOLUTIONS™
4000 N. Big Spring | Midland, TX 79705 | www.tetratech.com

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Wednesday, January 31, 2018 4:19 PM
To: Gonzales, Clair <Clair.Gonzales@tetratech.com>; Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: Nelson Patton <nelson@saberogv.com>; doug@saberogv.com; Tavarez, Ike <Ike.Tavarez@tetratech.com>
Subject: RE: Saber Oil & Gas - Cochise 2 State 4 Closure Request (1RP-4845)

Ms. Gonzales:

Several clarifications to the closure report for 1RP-4845:

- Currently, the entire release area has been excavated down to 1 ft. bgs?
- Were sidewall samples taken for confirmation?

Please be advised that Mark Naranjo will be the correspondent from NMSLO for like approvals.

Thanks,
Olivia

From: Gonzales, Clair [mailto:Clair.Gonzales@tetratech.com]
Sent: Thursday, January 25, 2018 7:33 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Groves, Amber <agroves@slo.state.nm.us>
Cc: Nelson Patton <nelson@saberogv.com>; doug@saberogv.com; Tavarez, Ike <Ike.Tavarez@tetratech.com>
Subject: FW: Saber Oil & Gas - Cochise 2 State 4 Closure Request (1RP-4845)

Olivia,

I wanted to touch base with you on this site and see if you have had a chance to review the closure report. Let me know if you have any questions or concerns.

Thank you,

Clair Gonzales
Clair Gonzales | **Project Manager**
Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946
clair.gonzales@tetratech.com

Tetra Tech | Complex World, CLEAR SOLUTIONS™
4000 N. Big Spring | Midland, TX 79705 | www.tetratech.com

From: Gonzales, Clair
Sent: Tuesday, November 28, 2017 10:16 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Groves, Amber <agroves@slo.state.nm.us>
Cc: Nelson Patton <nelson@saberogv.com>; doug@saberogv.com; Tavarez, Ike <Ike.Tavarez@tetratech.com>
Subject: Saber Oil & Gas - Cochise 2 State 4 Closure Request (1RP-4845)

Good Morning,

Attached is the closure report for the above referenced site located in Lea County, New Mexico. The closure report details the sampling and emergency response

activities performed at the site. Let me know if you have any questions or concerns.

Thank you,

Clair Gonzales
Clair Gonzales | **Geologist III**
Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946
clair.gonzales@tetratech.com

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4000 N. Big Spring | Midland, TX 79705 | www.tetratech.com

SITE INFORMATION

Report Type: Closure Report 1RP-4845

General Site Information:						
Site:	**Cochise 2 State 4**					
Company:	**Saber Oil & Gas Ventures, LLC.**					
Section, Township and Range	**Unit G**	**Sec. 02**	**T 19S**	**R 32E**		
Lease Number:	**API No. 30-025-31670**					
County:	**Lea County**					
GPS:	**32.692152° N**			**103.7347785° W**		
Surface Owner:	State					
Mineral Owner:						
Directions:	From the intersection of 126A and Dry Lake Rd in rural Lea County, travel east on Dry Lake Rd for approximately 5.10 mi, turn north onto lease road and continue for 2.25 mi, turn west onto lease road and continue for 1.20 mi to the location.					

Release Data:	
Date Released:	Unknown
Type Release:	Produced Water and Oil
Source of Contamination:	Flowline
Fluid Released:	Unknown
Fluids Recovered:	None

Official Communication:			
Name:	Nelson Patton		Ike Tavarez
Company:	Saber Oil & Gas		Tetra Tech
Address:	400 West Illinois Ave., Ste 950		4000 N. Big Spring
			Ste 401
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 685-0169		(432) 687-8110
Fax:			
Email:	nelson@saberogv.com		Ike.Tavarez@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	***0***	*250'-275'*
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	***0***	*0*
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	***0***	*0*
Total Ranking Score:	***0***	

Acceptable Soil RRAL (mg/kg)		
Benzene	***Total BTEX***	***TPH***
10	50	5,000

TETRA TECH

November 27, 2017

Ms. Olivia Yu
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Closure Report for the Saber Oil & Gas Ventures, LLC., Cochise 2 State 4, Unit G, Section 02, Township 19 South, Range 32 East, Lea County, New Mexico. 1RP-4845

Mr. Yu:

Tetra Tech, Inc. (Tetra Tech) was contacted by Saber Oil & Gas Ventures, LLC. (Saber) to evaluate and assess a spill at the Cochise 2 State 4, Unit G, Section 02, Township 19 South, Range 32 East, Lea County, New Mexico (site). The spill site coordinates are N 32.692152 º, W 103.7347785 º. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on October 12, 2017, and released an unknown amount of oil and produced water due to a ruptured flowline. The release occurred in the pasture adjacent to the pad and measured approximately 25' x 50'. As part of an emergency response, the release area was excavated to a depth of 1.0' below surface on October 18, 2017. The excavation was performed to remove the saturated soils and prevent vertical migration of the fluids. Approximately 40 cubic yards of excavated material was hauled for proper disposal. The initial C-141 form is included in Appendix A.

Groundwater

No water wells were listed within Section 02 on the New Mexico Office of the State Engineer's website. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in this area is between 250' and 275' below surface. The groundwater data is shown in Appendix B.

TETRA TECH

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment and Analytical Results

On October 18, 2017, Tetra Tech personnel were onsite to supervise the excavation and to sample the release area. Once the area was excavated to a depth of 1.0' below surface, one backhoe trench (T-1) was installed in the release area to a total depth of 6.0' below excavation bottom (BEB). All of the samples collected were analyzed for TPH analysis by EPA Method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The trench location is shown on Figure 3.

Referring to Table 1, none of the samples showed TPH, benzene, or total BTEX concentrations above the RRALs. A TPH high of 4,157 mg/kg was detected at 2.0' BEB, which declined with depth to 106 mg/kg at 6.0' BEB. The sample collected at 1.0' BEB showed a benzene concentration of 0.0145 mg/kg and a total BTEX concentration of 1.83 mg/kg. The benzene and total BTEX concentrations declined with depth and showed bottom trench concentrations below the laboratory reporting limits.

Additionally, no significant chloride concentrations were detected in the subsurface soils, with a chloride high of 456 mg/kg at 2.0' BEB.

Revegetation Plan

The backfilled areas will be seeded in June 2018 in order to coincide with the rainy season in Southeastern New Mexico to aid in revegetation. Based on the soil type at the site, the BLM seed mixture 2 (Sandy Sites) will be used for seeding and planted in the amount specified in the pounds of pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The BLM seed mixture details and corresponding pounds pure live seed per acre are included in Appendix C.

Conclusions and Recommendations

None of the samples exceeded the RRALs for TPH, benzene or Total BTEX. Based on the laboratory results, Saber requests closure of this spill issue. The excavated area will be backfilled with clean material to surface grade. The final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment and remediation activities for this site, please call at (432) 682-4559.

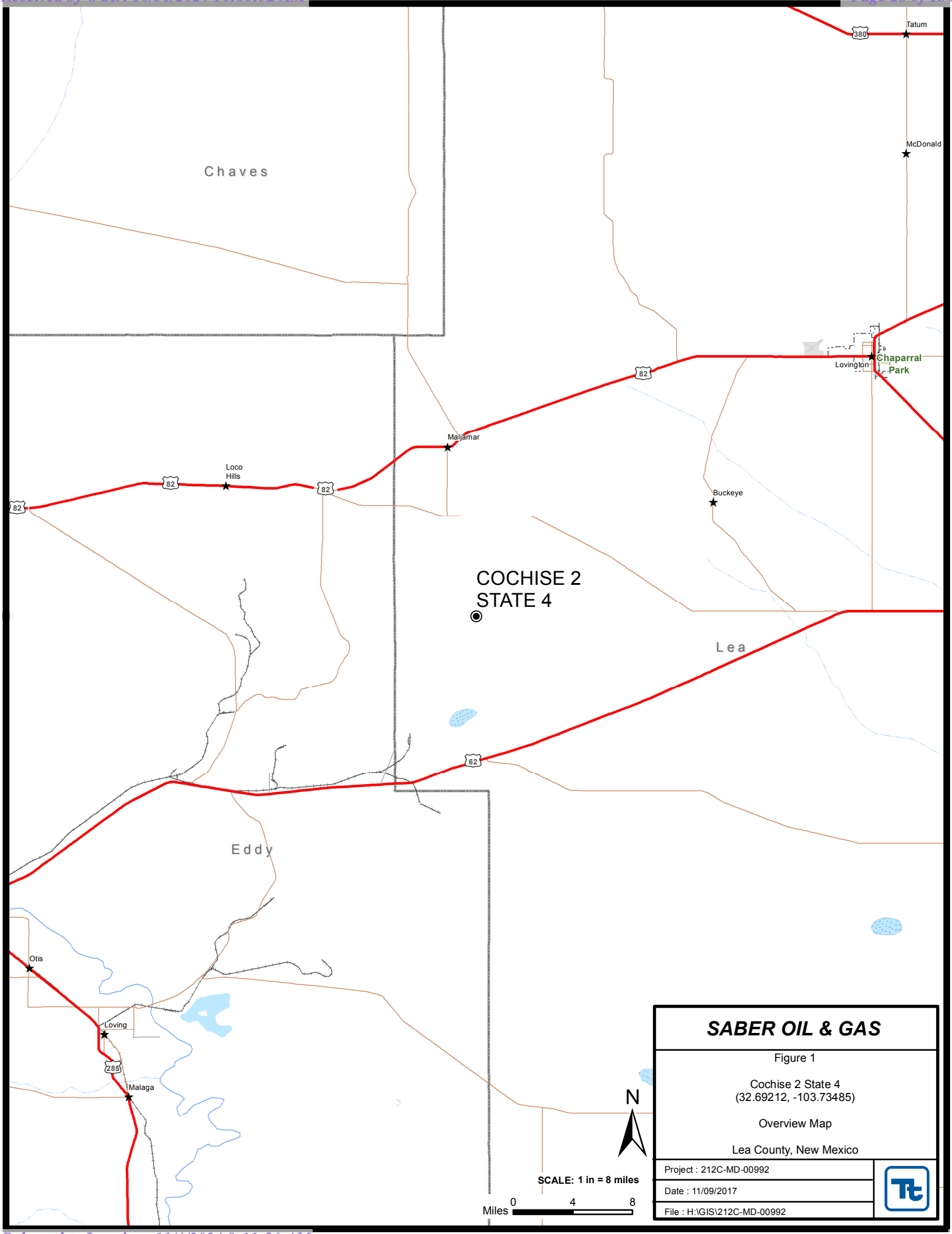
Respectfully submitted,
TETRA TECH

Clair Gonzales,
Geologist

Ike Tavarez,
Senior Project Manager

cc: Nelson Patton – Saber
Doug Keathley - Saber
Amber Groves - SLO

Figures



SABER OIL & GAS

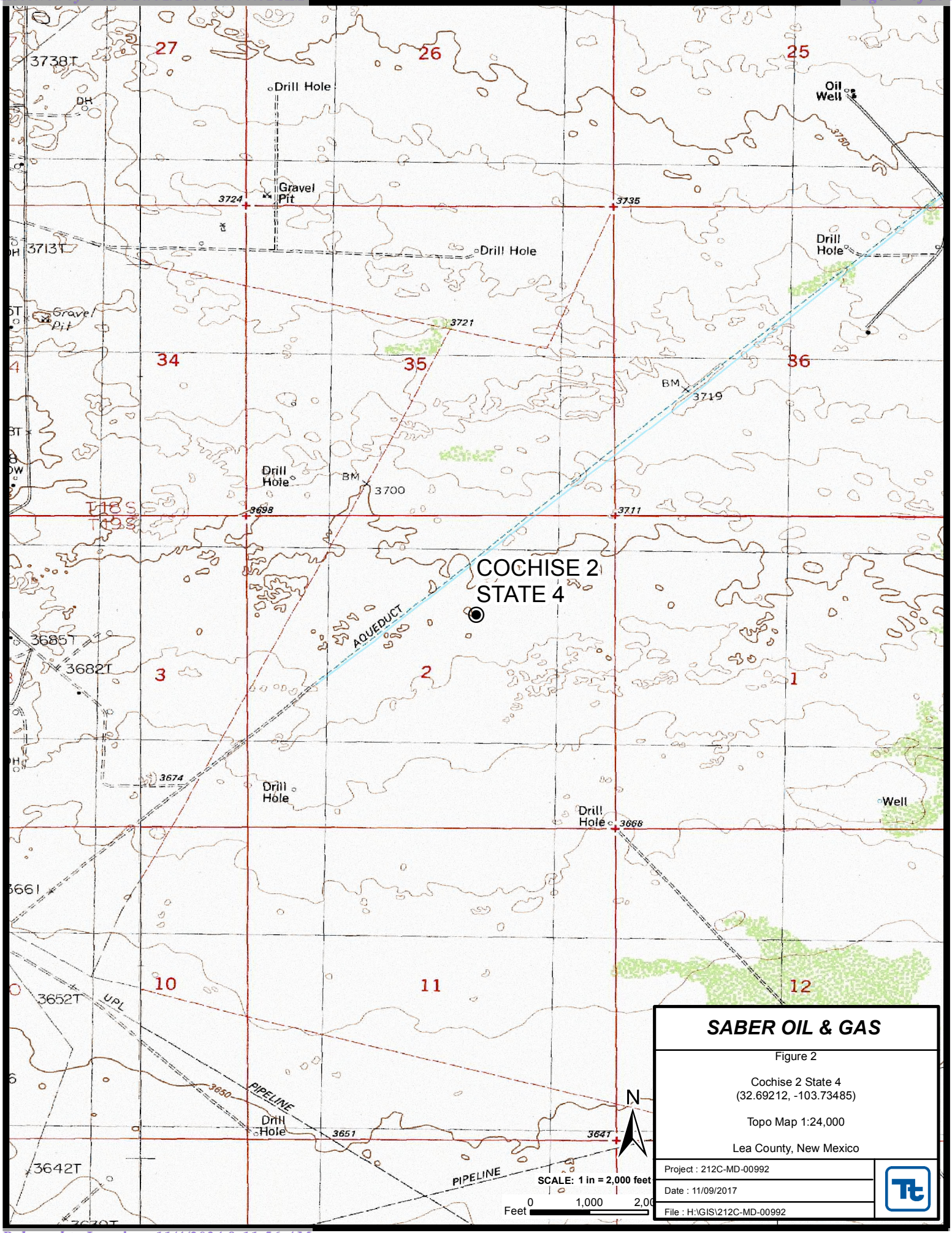
Figure 1

Cochise 2 State 4
(32.69212, -103.73485)

Overview Map

Lea County, New Mexico

Project : 212C-MD-00992	
Date : 11/09/2017	
File : H:\GIS\212C-MD-00992	


COCHISE 2
STATE 4
SABER OIL & GAS
Figure 2
Cochise 2 State 4
(32.69212, -103.73485)
Topo Map 1:24,000
Lea County, New Mexico
Project : 212C-MD-00992
Date : 11/09/2017
File : H:\GIS\212C-MD-00992
SCALE: 1 in = 2,000 feet
Feet 0 1,000
N
Drill Hole
Oil Well
Gravel Pit
AQUEDUCT
PIPELINE
UPL
BM 3719
BM 3700
3738T
3713T
3685T
3682T
3652T
3642T
3724
3735
3721
3698
3711
3674
3668
3651
3641
3650
27
26
25
34
35
36
3
2
1
10
11
12


PASTURE
50'
25'
T-1
FLOWLINE
FLOWLINE
WELL
PAD
N
SCALE: 1 IN = 50 FEET
0 25 50
Feet
EXPLANATION
TRENCH SAMPLE LOCATION
SPILL AREA
SABER OIL & GAS
Figure 3
Cochise 2 State 4
(32.69212, -103.73485)
Spill Assessment Map
Lea County, New Mexico
Project : 212C-MD-00992
Date : 11/09/2017
File : H:\GIS\212C-MD-00992

Tables

Table 1
Saber Oil & Gas
Cochise 2 State 4
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	C6-C10	C10-C28	C28-C35	Total						
T-1	10/18/2017	1	1	X		271	3,490	347	4,108	0.0145	0.3720	0.376	1.07	1.83	253
	"	2	1	X		41.2	3,970	146	4,157	<0.00200	0.0613	0.118	0.256	0.435	456
	"	3	1	X		-	-	-	-	-	-	-	-	-	513
	"	4	1	X		-	-	-	-	-	-	-	-	-	319
	"	5	1	X		-	-	-	-	-	-	-	-	-	51.9
	"	6	1	X		<15.0	106	<15.0	106	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	58.4

BEB Below Excavation Bottom
(-) Not Analyzed

Photos

Saber Oil & Gas Ventures, LLC.
Cochise 2 State 4
Lea County, New Mexico

TETRA TECH

View Northwest – Release Area

View Northeast – Excavated Release Area

Saber Oil & Gas Ventures, LLC.
Cochise 2 State 4
Lea County, New Mexico

TETRA TECH

View West – Area of T-1

Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company **Saber Oil and Gas Ventures, LLC**	Contact **Doug Keathley**
Address **400 West Illinois, Midland, TX 79701**	Telephone No. **(432) 685-0169**
Facility Name **Cochise 2 State 4**	Facility Type **Well**

Surface Owner: **State**	Mineral Owner	API No. 30-025-31670

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	2	19S	32E					Lea

Latitude N 32.692152° **Longitude** W 103.7347785 °

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release: Flowline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 10/12/17 Discovered by State Land
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

RECEIVED
By Olivia Yu at 2:25 pm, Oct 16, 2017

Describe Cause of Problem and Remedial Action Taken.*

The release was caused by failed or rupture flowline west of the well. The flowline was repaired and back in service.

Describe Area Affected and Cleanup Action Taken.*

An unknown volume of oil and water was release impacting an area of approximately 25' x 50' in the pasture. The area will be scraped to remove the saturated soil from the area. Once removed, the area will be assessed to define extents. Tetra Tech Environmental has been retained to aid in the remediation.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: Doug Keathley	Approved by District Supervisor: oy
Title: VP of Engineering	Approval Date: 10/16/2017 Expiration Date:
E-mail Address: doug@saberogv.com	Conditions of Approval: see attached directive Attached ☐ ✓
Date: 10/13/2017 Phone: 432-685-0169	

* Attach Additional Sheets If Necessary

1RP-4845 nOY1728952379 pOY1728952628

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Saber Oil and Gas Ventures, LLC**	Contact **Doug Keathley**
Address **400 West Illinois, Midland, TX 79701**	Telephone No. **(432) 685-0169**
Facility Name **Cochise 2 State 4**	Facility Type **Well**

Surface Owner: **State**	Mineral Owner	API No. 30-025-31670

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	2	19S	32E					Lea

Latitude N 32.692152° **Longitude** W 103.7347785 °

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release: Flowline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 10/12/17 Discovered by State Land
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

The release was caused by failed or rupture flowline west of the well. The flowline was repaired and back in service. An unknown volume of oil and water was release impacting an area of approximately 25' x 50' in the pasture.

Describe Area Affected and Cleanup Action Taken.*

As a part of an emergency response, the area was excavated to 1.0' below surface to remove the saturated soils and prevent vertical migration. Soil samples were collected to define the spills extents. No soil exceeded the RRAL's. Tetra Tech prepared a closure report and submitted to NMOCD for review.

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Ike Tavarez, P.G.	Approved by District Supervisor:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: ike.tavarez@tetratech.com	Conditions of Approval:	Attached ☐
Date: 11/9/17 Phone: 432-687-8123		

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
Saber Oil & Gas - Cochise 2 State 4
Lea County, New Mexico

18 South 31 East

6	5	4	3	2	1
7	8	9	10	11	12 400
18	17	16	15 98	14 317	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35 261	36

18 South 32 East

6	5	4 65	3	2	1
7 460 82	8	9	10	11	12
18	17	16 84	15	14	13
19	20 164	21	22 429	23	24
30	29	28	27	26	25
31	32	33	34 117	35	36

18 South 33 East

6	5	4	3 60	2	1
7	8 100	9	10 62	11 46	12 143 140
18	17 85	16	15	14 36	13 60
19 >140	20	21	22	23	24 195
30 35	29	28	27	26	25
31	32	33 177	34	35	36

19 South 31 East

6	5 SITE	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19 180	20	21	22	23	24
30	29	28 180	27	26	25
31	32	33 101 140	34	35	36 130

19 South 32 East

6	5	4	3	2	1
7	8 365	9	10	11	12
18	17	16	15	14	13 135 dry
19 102	20 345	21	22	23	24
30	29	28	27	26	25
31	32	33	34 250	35	36

19 South 33 East

6	5	4	3	2	1
7	8	9	10	11	12
18 340	17 116	16	15	14	13
19	20	21	22	23	24
30	29	28 130 dry	27	26 92 85	25
31	32 185	33	34	35	36

20 South 31 East

6	5	4	3	2	1
7	8	9	10 130	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36 80

20 South 32 East

6	5	4	3	2	1 21.8
7	8	9	10	11	12
18 89	17	16	15	14	13
19	20	21	22	23	24
30 9.9	29	28	27 12.3	26	25
31	32	33	34	35	36 46

20 South 33 East

6	5 325 278	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24 +300
30	29	28	27	26	25
31	32	33	34	35	36

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Tetra Tech installed temporary wells and field water level

143 NMOCD Groundwater map well location

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

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
CP 00075	O	CP	LE		2	4	34	19S	32E	617502	3609301	575		
CP 00563 POD1		CP	LE	1	1	2	19	19S	32E	612118	3613376*	300		
CP 00639 POD1		CP	LE		3	1	20	19S	32E	613029	3612880*	350	345	5
CP 00640 POD1		CP	LE		2	2	19	19S	32E	612621	3613280*	260	102	158
CP 00812 POD1		CP	LE		4	4	01	19S	32E	620623	3616973*	200		
CP 01656 POD1		CP	LE	3	4	3	17	19S	32E	613368	3613646	70		

Average Depth to Water: **223 feet**

Minimum Depth: **102 feet**

Maximum Depth: **345 feet**

Record Count: 6

PLSS Search:

Township: 19S **Range:** 32E

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

Appendix C

BLM SERIAL #:

COMPANY REFERENCE:

3.3 Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed: Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

Appendix D

Analytical Report 566095

for

Tetra Tech- Midland

Project Manager: Ike Tavarez

Saber- Cochis 2 State 4

212C MD 00992

30-OCT-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

30-OCT-17

Project Manager: **Ike Tavarez**
Tetra Tech- Midland
4000 N. Big Spring Suite 401
Midland, TX 79705

Reference: XENCO Report No(s): **566095**
Saber- Cochis 2 State 4
Project Address: Lea Co, NM

Ike Tavarez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 566095. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 566095 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 566095

Tetra Tech- Midland, Midland, TX

Saber- Cochis 2 State 4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Trench #1 (1') (BEB 1')	S	10-18-17 00:00		566095-001
Trench #1 (2') (BEB 1')	S	10-18-17 00:00		566095-002
Trench #1 (3') (BEB 1')	S	10-18-17 00:00		566095-003
Trench #1 (4') (BEB 1')	S	10-18-17 00:00		566095-004
Trench #1 (5') (BEB 1')	S	10-18-17 00:00		566095-005
Trench #1 (6') (BEB 1')	S	10-18-17 00:00		566095-006

Version: 1.%

CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Saber- Cochis 2 State 4

Project ID: *212C MD 00992*
Work Order Number(s): *566095*

Report Date: *30-OCT-17*
Date Received: *10/20/2017*

Sample receipt non conformances and comments:

566095-006- TPH and BTEX added per Clair Gonzalez e-mail 10/25/17--KB

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3031655 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3031732 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 566095

Tetra Tech- Midland, Midland, TX

Project Name: Saber- Cochis 2 State 4

Project Id: 212C MD 00992
Contact: Ike Tavarez
Project Location: Lea Co, NM

Date Received in Lab: Fri Oct-20-17 11:50 am
Report Date: 30-OCT-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566095-001		566095-002		566095-003		566095-004		566095-005		566095-006	
	Field Id:	Trench #1 (1') (BEB 1')		Trench #1 (2') (BEB 1')		Trench #1 (3') (BEB 1')		Trench #1 (4') (BEB 1')		Trench #1 (5') (BEB 1')		Trench #1 (6') (BEB 1')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-18-17 00:00		Oct-18-17 00:00		Oct-18-17 00:00		Oct-18-17 00:00		Oct-18-17 00:00		Oct-18-17 00:00	
BTEX by EPA 8021B SUB: TX104704215-17-23	***Extracted:***	Oct-25-17 10:30		Oct-25-17 10:30								Oct-26-17 11:00	
	Analyzed:	Oct-26-17 03:43		Oct-26-17 03:24								Oct-26-17 22:34	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Benzene		0.0145	0.00199	ND	0.00200							ND	0.00200
Toluene		0.372	0.00199	0.0613	0.00200							ND	0.00200
Ethylbenzene		0.376	0.00199	0.118	0.00200							ND	0.00200
m,p-Xylenes		0.692	0.00398	0.151	0.00399							ND	0.00399
o-Xylene		0.377	0.00199	0.105	0.00200							ND	0.00200
Total Xylenes		1.07	0.00199	0.256	0.00200							ND	0.00200
Total BTEX		1.83	0.00199	0.435	0.00200							ND	0.00200
Inorganic Anions by EPA 300/300.1	***Extracted:***	Oct-24-17 10:00		Oct-24-17 10:00		Oct-24-17 10:00		Oct-24-17 10:00		Oct-24-17 10:00		Oct-24-17 12:00	
	Analyzed:	Oct-24-17 18:57		Oct-24-17 21:40		Oct-24-17 21:47		Oct-24-17 21:54		Oct-24-17 22:00		Oct-24-17 22:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		253	4.98	456	4.99	513	4.95	319	4.92	51.9	4.97	58.4	4.94
TPH By SW8015 Mod	***Extracted:***	Oct-20-17 17:00		Oct-20-17 17:00								Oct-25-17 16:00	
	Analyzed:	Oct-21-17 06:51		Oct-21-17 07:10								Oct-26-17 02:52	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Gasoline Range Hydrocarbons		271	74.9	41.2	15.0							ND	15.0
Diesel Range Organics		3490	74.9	3970	15.0							106	15.0
Oil Range Hydrocarbons		347	74.9	146	15.0							ND	15.0

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Kelsey Brooks
Project Manager

Final 1.000

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031144 **Sample:** 566095-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/17 06:51

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.8	117	70-135	
o-Terphenyl	51.4	49.9	103	70-135	

Lab Batch #: 3031144 **Sample:** 566095-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/17 07:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.9	107	70-135	
o-Terphenyl	48.5	50.0	97	70-135	

Lab Batch #: 3031681 **Sample:** 566095-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 02:52

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	99.8	111	70-135	
o-Terphenyl	53.2	49.9	107	70-135	

Lab Batch #: 3031732 **Sample:** 566095-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 03:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 3031732 **Sample:** 566095-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 03:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0243	0.0300	81	80-120	
4-Bromofluorobenzene	0.0248	0.0300	83	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031655 **Sample:** 566095-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 22:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 3031144 **Sample:** 7633054-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/21/17 04:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

Lab Batch #: 3031681 **Sample:** 7633364-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 18:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	52.5	50.0	105	70-135	

Lab Batch #: 3031732 **Sample:** 7633241-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 22:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 3031655 **Sample:** 7633345-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/17 15:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031144 **Sample:** 7633054-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/21/17 04:28

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	59.8	50.0	120	70-135	

Lab Batch #: 3031681 **Sample:** 7633364-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 19:09

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	100	98	70-135	
o-Terphenyl	48.0	50.0	96	70-135	

Lab Batch #: 3031732 **Sample:** 7633241-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 21:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 3031655 **Sample:** 7633345-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/17 13:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 3031144 **Sample:** 7633054-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/21/17 04:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	51.8	50.0	104	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031732 **Sample:** 7633241-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 21:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 3031681 **Sample:** 7633364-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/17 10:19

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	52.3	50.0	105	70-135	

Lab Batch #: 3031655 **Sample:** 7633345-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/17 13:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 3031144 **Sample:** 565936-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/17 05:29

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.7	110	70-135	
o-Terphenyl	53.4	49.9	107	70-135	

Lab Batch #: 3031681 **Sample:** 565000-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/25/17 20:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	99.9	100	70-135	
o-Terphenyl	49.2	50.0	98	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031732 **Sample:** 566212-007 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/25/17 21:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

Lab Batch #: 3031655 **Sample:** 566321-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 13:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 3031144 **Sample:** 565936-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/17 05:50

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.9	108	70-135	
o-Terphenyl	49.9	50.0	100	70-135	

Lab Batch #: 3031681 **Sample:** 565000-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/25/17 20:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.1	99.9	95	70-135	
o-Terphenyl	48.1	50.0	96	70-135	

Lab Batch #: 3031732 **Sample:** 566212-007 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/25/17 22:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031655 **Sample:** 566321-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 14:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0337	0.0300	112	80-120	
4-Bromofluorobenzene	0.0355	0.0300	118	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Version: 1.%

BS / BSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order #: 566095 **Project ID:** 212C MD 00992

Analyst: ALJ **Date Prepared:** 10/25/2017 **Date Analyzed:** 10/25/2017

Lab Batch ID: 3031732 **Sample:** 7633241-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00202	0.101	0.126	125	0.101	0.125	124	1	70-130	35	
Toluene	<0.00202	0.101	0.124	123	0.101	0.124	123	0	70-130	35	
Ethylbenzene	<0.00202	0.101	0.119	118	0.101	0.121	120	2	71-129	35	
m,p-Xylenes	<0.00404	0.202	0.239	118	0.201	0.242	120	1	70-135	35	
o-Xylene	<0.00202	0.101	0.116	115	0.101	0.118	117	2	71-133	35	

Analyst: ALJ **Date Prepared:** 10/26/2017 **Date Analyzed:** 10/26/2017

Lab Batch ID: 3031655 **Sample:** 7633345-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00200	0.100	0.0958	96	0.0998	0.0867	87	10	70-130	35	
Toluene	<0.00200	0.100	0.101	101	0.0998	0.0908	91	11	70-130	35	
Ethylbenzene	<0.00200	0.100	0.110	110	0.0998	0.0997	100	10	71-129	35	
m,p-Xylenes	<0.00401	0.200	0.216	108	0.200	0.196	98	10	70-135	35	
o-Xylene	<0.00200	0.100	0.108	108	0.0998	0.0977	98	10	71-133	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

BS / BSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order #: 566095 **Project ID:** 212C MD 00992

Analyst: MNV **Date Prepared:** 10/24/2017 **Date Analyzed:** 10/24/2017

Lab Batch ID: 3031338 **Sample:** 7633142-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	250	100	250	249	100	0	90-110	20	

Analyst: MNV **Date Prepared:** 10/24/2017 **Date Analyzed:** 10/24/2017

Lab Batch ID: 3031342 **Sample:** 7633143-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	250	100	250	249	100	0	90-110	20	

Analyst: ARM **Date Prepared:** 10/20/2017 **Date Analyzed:** 10/21/2017

Lab Batch ID: 3031144 **Sample:** 7633054-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1120	112	1000	1050	105	6	70-135	35	
Diesel Range Organics	<15.0	1000	1120	112	1000	1110	111	1	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

BS / BSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order #: 566095 **Project ID:** 212C MD 00992

Analyst: ARM **Date Prepared:** 10/25/2017 **Date Analyzed:** 10/25/2017

Lab Batch ID: 3031681 **Sample:** 7633364-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons	<15.0	1000	905	91	1000	936	94	3	70-135	35	
Diesel Range Organics	<15.0	1000	1050	105	1000	1100	110	5	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order # : 566095 **Project ID:** 212C MD 00992

Lab Batch ID: 3031655 **QC- Sample ID:** 566321-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/26/2017 **Date Prepared:** 10/26/2017 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.00211	0.100	0.111	109	0.101	0.113	110	2	70-130	35	
Toluene	0.00542	0.100	0.0991	94	0.101	0.0928	87	7	70-130	35	
Ethylbenzene	<0.00201	0.100	0.0881	88	0.101	0.0768	76	14	71-129	35	
m,p-Xylenes	<0.00402	0.201	0.176	88	0.202	0.152	75	15	70-135	35	
o-Xylene	<0.00201	0.100	0.0847	85	0.101	0.0753	75	12	71-133	35	

Lab Batch ID: 3031732 **QC- Sample ID:** 566212-007 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/25/2017 **Date Prepared:** 10/25/2017 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00199	0.0996	0.123	123	0.100	0.112	112	9	70-130	35	
Toluene	<0.00199	0.0996	0.110	110	0.100	0.0992	99	10	70-130	35	
Ethylbenzene	<0.00199	0.0996	0.104	104	0.100	0.0924	92	12	71-129	35	
m,p-Xylenes	<0.00398	0.199	0.213	107	0.200	0.189	95	12	70-135	35	
o-Xylene	<0.00199	0.0996	0.106	106	0.100	0.0953	95	11	71-133	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order # : 566095 **Project ID:** 212C MD 00992

Lab Batch ID: 3031338 **QC- Sample ID:** 566079-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/24/2017 **Date Prepared:** 10/24/2017 **Analyst:** MNV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	143	250	390	99	250	393	100	1	90-110	20	

Lab Batch ID: 3031338 **QC- Sample ID:** 566095-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/24/2017 **Date Prepared:** 10/24/2017 **Analyst:** MNV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	253	249	493	96	249	495	97	0	90-110	20	

Lab Batch ID: 3031342 **QC- Sample ID:** 566095-006 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/24/2017 **Date Prepared:** 10/24/2017 **Analyst:** MNV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	58.4	247	308	101	247	310	102	1	90-110	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order # : 566095 **Project ID:** 212C MD 00992

Lab Batch ID: 3031342 **QC- Sample ID:** 566207-007 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/25/2017 **Date Prepared:** 10/24/2017 **Analyst:** MNV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	93.5	247	345	102	247	344	101	0	90-110	20	

Lab Batch ID: 3031144 **QC- Sample ID:** 565936-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/21/2017 **Date Prepared:** 10/20/2017 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons	<15.0	997	1040	104	999	1050	105	1	70-135	35	
Diesel Range Organics	<15.0	997	1120	112	999	1110	111	1	70-135	35	

Lab Batch ID: 3031681 **QC- Sample ID:** 565000-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/25/2017 **Date Prepared:** 10/25/2017 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons	<15.0	999	973	97	999	971	97	0	70-135	35	
Diesel Range Organics	69.1	999	1050	98	999	1040	97	1	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

560095

Client Name: Saber	Site Manager: Ike Tavarez
Project Name: Cochis 2 State 4	
Project Location: (county, state) Lea County, New Mexico	Project #: 212C-MD-00992
Invoice to: Tetra Tech, Inc.	
Receiving Laboratory: Xenco Midland Tx	Sampler Signature: Mike Carmona

Comments: If TPH exceeds 5,000 mg/kg run deeper samples. If Benzene exceeds 10,000 mg/kg or Total BTEX exceeds 50 mg/kg run deeper samples

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD None	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M GRO - DRO - ORO - MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance			Hold
	Trench #1 (1') (BEB 1')	10/18/2017			X				X			1	N	X		X												X						
	Trench #1 (2') (BEB 1')	10/18/2017			X				X			1	N	X		X												X						
	Trench #1 (3') (BEB 1')	10/18/2017			X				X			1	N															X						
	Trench #1 (4') (BEB 1')	10/18/2017			X				X			1	N															X						
	Trench #1 (5') (BEB 1')	10/18/2017			X				X			1	N															X						
	Trench #1 (6') (BEB 1')	10/18/2017			X				X			1	N															X						

Relinquished by: mike Date: 10/20/17 Time: 1150
Received by: CH Date: 10/20 Time: 11:50

Relinquished by: Date: Time:
Received by: Date: Time:

Relinquished by: Date: Time:
Received by: Date: Time:

LAB USE ONLY
Sample Temperature

REMARKS:
STANDARD
☐ RUSH: Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Temp: 1.3 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.1

Inter-Office Shipment

IOS Number **1050631**

Date/Time: 10/20/17 12:28
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Connie Hernandez
Delivery Priority:
Air Bill No.:

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
566095-001	S	Trench #1 (1') (BEB 1')	10/18/17 00:00	SW8260B	VOCs by SW864 8260B	10/26/17	11/01/17	KEB	BDCME BRBZ BRCLME]	
566095-001	S	Trench #1 (1') (BEB 1')	10/18/17 00:00	SW8021B	BTEX by EPA 8021B	10/26/17	11/01/17	KEB	BR4FBZ BZ BZME EBZ X	
566095-002	S	Trench #1 (2') (BEB 1')	10/18/17 00:00	SW8260B	VOCs by SW864 8260B	10/26/17	11/01/17	KEB	BDCME BRBZ BRCLME]	
566095-002	S	Trench #1 (2') (BEB 1')	10/18/17 00:00	SW8021B	BTEX by EPA 8021B	10/26/17	11/01/17	KEB	BR4FBZ BZ BZME EBZ X	

Inter Office Shipment or Sample Comments:

Relinquished By Connie Hernandez

Date Relinquished: 10/20/2017

Received By: _____

Date Received: _____

Cooler Temperature: _____

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 10/20/2017 11:50:00 AM

Work Order #: 566095

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**Yes**
#18 Water VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Connie Hernandez Date: 10/20/2017

Checklist reviewed by: Kelsey Brooks Date: 10/20/2017

APPENDIX E – 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, Walsh & Watts, Inc, as reflected in our proposal (PKH247026).

Additional Scope Limitations

The development of this Closure Report is based on information provided by the Walsh & Watts, Inc 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 Walsh & Watts, Inc. 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 Walsh & Watts, Inc, 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 Walsh & Watts, Inc and Terracon. Any unauthorized distribution or reuse is at Walsh & Watts, Inc sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and Walsh & Watts, Inc 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 Walsh & Watts, Inc and all relying parties unless otherwise agreed in writing.

Terracon
4518 W. Pierce St. Carlsbad NM, 88220

October 18, 2024

Walsh & Watts, Inc.
155 Walsh Drive
Aledo, TX, 76008

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

RE: **Amended Closure Report**
Cochise 2 State #004
Unit G, Section 02, Township 19 South, Range 32 East
32.692152°, -103.7347785°
Lea County, New Mexico
NMOCD Incident No. NOY1728952379
Terracon Project No. KH247026

To Whom It May Concern:

Terracon Consultants, Inc. (Terracon) is pleased to submit this Amended Closure Report on behalf of Walsh & Watts Inc. (Walsh & Watts) to the New Mexico Oil and Gas Conservation Division (NMOCD) in response to the denial of the Closure Report associated with the release incident number NOY1728952379 for the above-referenced site. This report is prepared in line with New Mexico Oil Conservation Division (NMOCD) regulations, this report addresses the additional confirmation sampling requested by the NMOCD. Detailed assessment and remedial actions by Terracon are outlined in the following sections.

Action Items

Completed Actions

1) The NMOCD denied the previous closure report and requested additional delineation sampling be conducted. The additional delineation sampling actions taken are based on email correspondence with Ms. Ashley Maxwell dated September 27, 2024, wherein the NMOCD concurred with our approach to locate the delineation trench and collect composite confirmation samples within the former trench from a depth of 0.0 to 6.0 feet below grade surface (bgs) and the trench floor and collect confirmation floor samples every 200 square feet (sq. ft.) from the inferred release area. The NMOCD email correspondence is included in Appendix C.
2) Terracon collected confirmation samples at the inferred release area from six floor locations, and at the 1-foot wide former trench area from one sidewall and one floor location on September 27, 2024.
3) Maps and associated data for approval have been provided.

4) Soil samples collected from the site were submitted to an approved laboratory for analysis to determine levels of constituents vertically and horizontally in the locations inferred release area.

Anticipated Actions

1) Approval by the NMOCD.

Site Information

The Notice of the Release was provided to the EMNRD District 1 Hobbs, New Mexico Office by Doug Keathley on October 13, 2017, and subsequently approved on October 16, 2017 (EMNRD Reference ID: NOY1728952379). The site is located within Unit G, Section 2, Township 19 South, Range 32 East, approximately 11.20 miles South of Maljamar, New Mexico. A Topographical Map and Site Location Map is included as Exhibit 1 and Exhibit 2, respectively.

Regulatory Criteria

A review of data from the New Mexico Office of the State Engineer (NMOSE) website identified a water well (CP-00812) located 1.36 miles northeast of the site as indicated in the NMOSE Pod Location Map (Appendix A, Exhibit 3). This groundwater well was completed to a depth of 200 feet below ground surface (bgs) in 1965, depth to water was not noted. A review of the U.S. Fish and Wildlife Service, National Wetlands Inventory website indicates no wetland area is located within 5 miles of the site as indicated in the Designated Wetland Area Map (Appendix A, Exhibit 4). A review of geospatial data obtained from the BLM Carlsbad Field Office website indicated that the site is within an area of low risk for Karst formations, as indicated in the Cave Karst Public UCP Map (Appendix A, Exhibit 5).

Reclamation Standards

Per New Mexico Administrative Code (NMAC) 19.15.29.12, the closure criteria for the site are based on the remedial requirements for an off-pad release consisting of the removal of the affected soil from the surface to 4-feet below grade surface (bgs). The closure criteria are 50 mg/kg for Total Benzene, Toluene, Ethylbenzene and Xylenes (Total BTEX)(EPA Method 8021B), 10 mg/kg for Benzene (EPA Method 8021B), 10,000 mg/kg for Chlorides (EPA Method 300), 2,500 mg/kg for Total Petroleum Hydrocarbons (Total TPH) (EPA Method 8015M), and 1,000 mg/kg combined Gas Range Organics (GRO) Diesel Range Organics (DRO)(EPA Method 8015M).

Additional Confirmation/Closure Activities

The inferred release area based on the Tetra Tech report was estimated at 1,250 square feet. On July 4, 2024, a total of 4 composite wall confirmation soil samples (N-SW-01, E-SW-01,

S-SW-01 and W-SW-01) were collected at a depth of 0.5 feet bgs. On September 27, 2024, Terracon returned to the site and collected an additional eight composite confirmation soil samples. A total of 6 composite floor confirmation soil samples (FS 01 through FS 06), were collected at a depth of 0.5 feet bgs, and the inferred 1-foot-wide trench area was located, one confirmation composite wall sample (SW 01) was collected from 0.0 ft. to 6.0 ft bgs and one composite floor sample (FS 06) was collected from 6.0 feet bgs. The confirmation samples were submitted for analysis of BTEX, Chloride and TPH. Confirmation sample results for BTEX, Chloride and TPH were below applicable NMOCD closure criteria. A Confirmation Sample Location Map in included in Appendix A, Exhibit 6 and confirmation sample results are provided in Appendix B, Table 1.

Conclusion

In accordance with NMAC 19.15.29.12, remediation of the impacted material is complete, and Walsh & Watts, Inc. respectfully requests closure of incident NOY1728952379 that occurred at the Cochise 2 State #004 location.

We at Terracon are deeply grateful for the opportunity to offer our environmental services to Walsh & Watts, Inc. We are committed to providing the highest level of service and support. Should you need further information or have any queries, we encourage you to reach out to our office at your earliest convenience.
Sincerely,

Prepared by:

for **Charles F Smith**
Senior Project Manager
Carlsbad

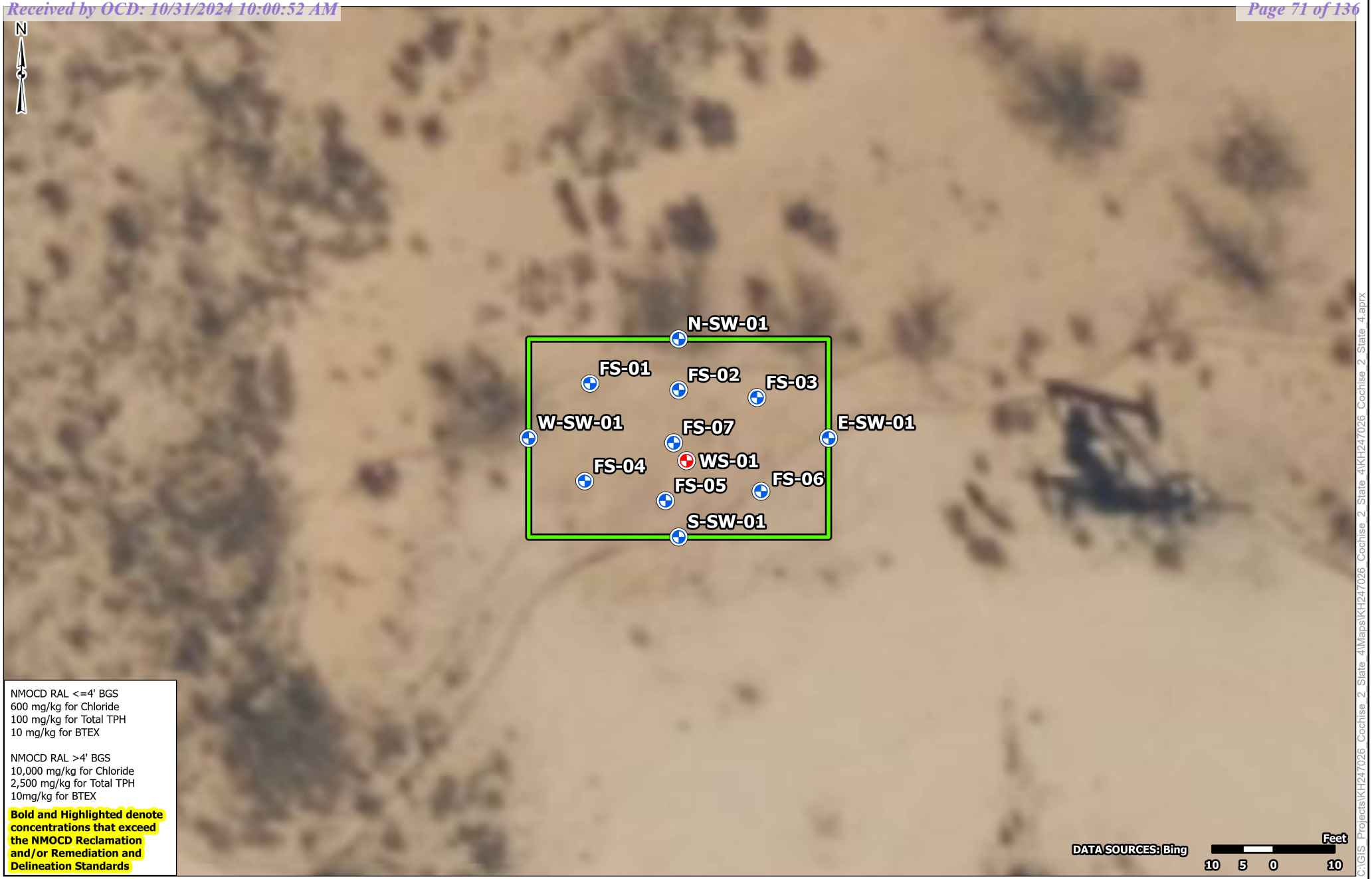
Reviewed by:

for **John Grams, P.G. (TX)**
Environmental Department Manager
Lubbock

Attachments:

C-141 Summary Sheet
Appendix A – Exhibits
Exhibit 1 – Site Sample Map
Appendix B - Tables
Table 1 - Confirmation Sample Results
Appendix C - EMNRD Closure Denial Email Correspondence
Appendix E - Terracon Standard of Care, Limitation, and Reliance

APPENDIX A – EXHIBITS



NMOCD RAL <=4' BGS
600 mg/kg for Chloride
100 mg/kg for Total TPH
10 mg/kg for BTEX

NMOCD RAL >4' BGS
10,000 mg/kg for Chloride
2,500 mg/kg for Total TPH
10mg/kg for BTEX

Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards

Release Area (1,250 Sq Ft)
Confirmation Floor Sample
Confirmation Wall Sample

Project No.:	KH247026
Date:	Oct 14 2024
Drawn By:	JWL
Reviewed By:	JRG

terracon
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

Confirmation Sample Location Map

Cochise 2 State 4
Walsh and Watts, Inc.
32.69215, -103.73478
Lea County, New Mexico

Exhibit

6

APPENDIX B – TABLES

Table 1
Soil Analytical Results Summary - Confirmation Samples
Project Code: KH247026
NMOCD Incident No. NOY1728952379

Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX[1] (mg/Kg)	Total TPH[2] (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
					EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
Release Assesment											
N-SW-01	6/4/2024	0.5	Comp	In-Situ	32	ND	ND	ND	ND	ND	ND
E-SW-01	6/4/2024	0.5	Comp	In-Situ	32	ND	ND	ND	ND	ND	ND
S-SW-01	6/4/2024	0.5	Comp	In-Situ	16	ND	ND	ND	ND	ND	ND
W-SW-01	6/4/2024	0.5	Comp	In-Situ	ND	ND	ND	ND	ND	ND	ND
Additional Assessment											
SW 01	9/27/2024	0.0-6.0	Comp	In-Situ	32.0	ND	ND	ND	ND	ND	ND
FS01	9/27/2024	1.0	Comp	In-Situ	ND	ND	ND	ND	ND	ND	ND
FS02	9/27/2024	1.0	Comp	In-Situ	16.0	ND	ND	ND	ND	ND	ND
FS03	9/27/2024	1.0	Comp	In-Situ	16.0	ND	ND	ND	ND	ND	ND
FS04	9/27/2024	1.0	Comp	In-Situ	ND	ND	ND	ND	ND	ND	ND
FS05	9/27/2024	1.0	Comp	In-Situ	ND	ND	ND	ND	ND	ND	ND
FS06	9/27/2024	1.0	Comp	In-Situ	ND	ND	ND	ND	ND	ND	ND
FS07	9/27/2024	6.0	Comp	In-Situ	32.0	ND	ND	ND	ND	ND	ND
NMOCD Reclamation Standards[3] (Surface to 4 ft bgs)					600	10	50	100	100	100	
NMOCD Remediation Standards[4] (Greater than Depths of 4 ft bgs)					10,000	10	50	2,500	2500	1,000	

1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes
2. TPH = Total petroleum hydrocarbons
3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegatation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs
4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 8/14/2018

ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL).
NA = Not Analyzed
Bold denotes concentrations above applicable laboratory SDLs.
Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.
In-situ = Sample is representative of material which remains in-place at the site.
Excavated = Sample is representative of materials which was excavated and disposed of at a permited disposal facility.

CARDINAL Laboratories

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

October 03, 2024

CHUCK SMITH

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: COCHISE 2 STATE 4

Enclosed are the results of analyses for samples received by the laboratory on 09/27/24 14:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/27/2024	Sampling Date:	09/27/2024
Reported:	10/03/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH247026	Sample Received By:	Tamara Oldaker
Project Location:	WALSH & WATTS - LEA CO		

Sample ID: SW 01 0-6 (H245906-01)

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	10/01/2024	ND	1.95	97.3	2.00	2.58	
Toluene*	<0.050	0.050	10/01/2024	ND	2.01	100	2.00	2.54	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	2.58	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.05	101	6.00	2.49	
Total BTEX	<0.300	0.300	10/01/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/30/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	194	96.9	200	1.41	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	199	99.7	200	0.586	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane *100 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *87.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/27/2024	Sampling Date:	09/27/2024
Reported:	10/03/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH247026	Sample Received By:	Tamara Oldaker
Project Location:	WALSH & WATTS - LEA CO		

Sample ID: FS 01 1 (H245906-02)

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	10/01/2024	ND	1.95	97.3	2.00	2.58	
Toluene*	<0.050	0.050	10/01/2024	ND	2.01	100	2.00	2.54	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	2.58	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.05	101	6.00	2.49	
Total BTEX	<0.300	0.300	10/01/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/30/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	194	96.9	200	1.41	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	199	99.7	200	0.586	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane *94.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *82.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/27/2024	Sampling Date:	09/27/2024
Reported:	10/03/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH247026	Sample Received By:	Tamara Oldaker
Project Location:	WALSH & WATTS - LEA CO		

Sample ID: FS 02 1 (H245906-03)

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	10/01/2024	ND	1.95	97.3	2.00	2.58	
Toluene*	<0.050	0.050	10/01/2024	ND	2.01	100	2.00	2.54	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	2.58	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.05	101	6.00	2.49	
Total BTEX	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/30/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	194	96.9	200	1.41	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	199	99.7	200	0.586	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane *103 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/27/2024	Sampling Date:	09/27/2024
Reported:	10/03/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH247026	Sample Received By:	Tamara Oldaker
Project Location:	WALSH & WATTS - LEA CO		

Sample ID: FS 03 1 (H245906-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/01/2024	ND	1.95	97.3	2.00	2.58	
Toluene*	<0.050	0.050	10/01/2024	ND	2.01	100	2.00	2.54	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	2.58	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.05	101	6.00	2.49	
Total BTEX	<0.300	0.300	10/01/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	09/30/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	194	96.9	200	1.41	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	199	99.7	200	0.586	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane *95.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/27/2024	Sampling Date:	09/27/2024
Reported:	10/03/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH247026	Sample Received By:	Tamara Oldaker
Project Location:	WALSH & WATTS - LEA CO		

Sample ID: FS 04 1 (H245906-05)

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	10/01/2024	ND	1.95	97.3	2.00	2.58	
Toluene*	<0.050	0.050	10/01/2024	ND	2.01	100	2.00	2.54	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	2.58	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.05	101	6.00	2.49	
Total BTEX	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/30/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	194	96.9	200	1.41	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	199	99.7	200	0.586	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane *100 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/27/2024	Sampling Date:	09/27/2024
Reported:	10/03/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH247026	Sample Received By:	Tamara Oldaker
Project Location:	WALSH & WATTS - LEA CO		

Sample ID: FS 05 1 (H245906-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/01/2024	ND	1.95	97.3	2.00	2.58	
Toluene*	<0.050	0.050	10/01/2024	ND	2.01	100	2.00	2.54	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	2.58	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.05	101	6.00	2.49	
Total BTEX	<0.300	0.300	10/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/30/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	194	96.9	200	1.41	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	199	99.7	200	0.586	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane *95.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/27/2024	Sampling Date:	09/27/2024
Reported:	10/03/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH247026	Sample Received By:	Tamara Oldaker
Project Location:	WALSH & WATTS - LEA CO		

Sample ID: FS 06 1 (H245906-07)

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	10/01/2024	ND	1.95	97.3	2.00	2.58	
Toluene*	<0.050	0.050	10/01/2024	ND	2.01	100	2.00	2.54	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	2.58	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.05	101	6.00	2.49	
Total BTEX	<0.300	0.300	10/01/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/30/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	194	96.9	200	1.41	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	199	99.7	200	0.586	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane *82.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *70.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	09/27/2024	Sampling Date:	09/27/2024
Reported:	10/03/2024	Sampling Type:	Soil
Project Name:	COCHISE 2 STATE 4	Sampling Condition:	Cool & Intact
Project Number:	KH247026	Sample Received By:	Tamara Oldaker
Project Location:	WALSH & WATTS - LEA CO		

Sample ID: FS 07 6 (H245906-08)

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	10/01/2024	ND	1.95	97.3	2.00	2.58	
Toluene*	<0.050	0.050	10/01/2024	ND	2.01	100	2.00	2.54	
Ethylbenzene*	<0.050	0.050	10/01/2024	ND	2.02	101	2.00	2.58	
Total Xylenes*	<0.150	0.150	10/01/2024	ND	6.05	101	6.00	2.49	
Total BTEX	<0.300	0.300	10/01/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	09/30/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2024	ND	194	96.9	200	1.41	
DRO >C10-C28*	<10.0	10.0	10/01/2024	ND	199	99.7	200	0.586	
EXT DRO >C28-C36	<10.0	10.0	10/01/2024	ND					

Surrogate: 1-Chlorooctane *94.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *82.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Terracon
Project Manager: Chuck Smith
Address: 4526 W. Pierce Street
City: Carlsbad State: NM Zip: 88220
Phone #: 5756895949 Fax #:
Project #: KH247026 Project Owner: Walsh & Watts
Project Name: Cochise 2 State 4
Project Location: Lea
Sampler Name: Becky Sue Meadows

BILL TO:
P.O. #:
Company:
Attn:
Address:
City:
State:
Phone #:
Fax #:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Depth Start	Depth End	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX: GROUNDWAT	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride (EPA Method4500)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold
H245906																				
1	SW 01	0	6	C	1			X					X		9/27/2024	12:02	X	X	X	
2	FS 01	1	1	C	1			X					X		9/27/2024	12:06	X	X	X	
3	FS 02	1	1	C	1			X					X		9/27/2024	12:13	X	X	X	
4	FS 03	1	1	C	1			X					X		9/27/2024	12:16	X	X	X	
5	FS 04	1	1	C	1			X					X		9/27/2024	12:30	X	X	X	
6	FS 05	1	1	C	1			X					X		9/27/2024	12:26	X	X	X	
7	FS 06	1	1	C	1			X					X		9/27/2024	12:27	X	X	X	
8	FS 07	6	6	C	1			X					X		9/27/2024	11:51	X	X	X	

ANALYS REQUEST

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

Relinquished By: B Meadows Date: 9-27-24 Time: 1450 Received By: Tamara Oldaker
Relinquished By: Date: Time: Received By:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:
4.9 Observed Temp. °C
4.3 Corrected Temp. °C
Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No
CHECKED BY: (Initials) TO

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
REMARKS:
joesph.guesnier@terracon.com;travis.casey@terracon.com;chuck.smith@terracon.com; beckysue.miller@terracon.com gus.sanchez@terracon.com
Turnaround Time: Standard ☒ Rush ☐ Bacteria (only) Sample Condition
Thermometer ID #140 Cool ☐ Yes ☐ No Observed Temp. °C
Correction Factor -0.5°C +0.9/27/24 Corrected Temp. °C

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

FORM-006 R 3.2 10/07/21

APPENDIX E – 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, Walsh & Watts, Inc, as reflected in our proposal (PKH247026).

Additional Scope Limitations

The development of this Closure Report is based on information provided by the Walsh & Watts, Inc 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 Walsh & Watts, Inc. 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 Walsh & Watts, Inc, 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 Walsh & Watts, Inc and Terracon. Any unauthorized distribution or reuse is at Walsh & Watts, Inc sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and Walsh & Watts, Inc 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 Walsh & Watts, Inc and all relying parties unless otherwise agreed in writing.

SITE INFORMATION

Report Type: Closure Report 1RP-4845

General Site Information:						
Site:	**Cochise 2 State 4**					
Company:	**Saber Oil & Gas Ventures, LLC.**					
Section, Township and Range	**Unit G**	**Sec. 02**	**T 19S**	**R 32E**		
Lease Number:	**API No. 30-025-31670**					
County:	**Lea County**					
GPS:	**32.692152° N**			**103.7347785° W**		
Surface Owner:	State					
Mineral Owner:						
Directions:	From the intersection of 126A and Dry Lake Rd in rural Lea County, travel east on Dry Lake Rd for approximately 5.10 mi, turn north onto lease road and continue for 2.25 mi, turn west onto lease road and continue for 1.20 mi to the location.					

Release Data:	
Date Released:	Unknown
Type Release:	Produced Water and Oil
Source of Contamination:	Flowline
Fluid Released:	Unknown
Fluids Recovered:	None

Official Communication:			
Name:	Nelson Patton		Ike Tavarez
Company:	Saber Oil & Gas		Tetra Tech
Address:	400 West Illinois Ave., Ste 950		4000 N. Big Spring
			Ste 401
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 685-0169		(432) 687-8110
Fax:			
Email:	nelson@saberogv.com		Ike.Tavarez@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	***0***	*250'-275'*
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	***0***	*0*
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	***0***	*0*
Total Ranking Score:	***0***	

Acceptable Soil RRAL (mg/kg)		
Benzene	***Total BTEX***	***TPH***
10	50	5,000

TETRA TECH

November 27, 2017

Ms. Olivia Yu
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Closure Report for the Saber Oil & Gas Ventures, LLC., Cochise 2 State 4, Unit G, Section 02, Township 19 South, Range 32 East, Lea County, New Mexico. 1RP-4845

Mr. Yu:

Tetra Tech, Inc. (Tetra Tech) was contacted by Saber Oil & Gas Ventures, LLC. (Saber) to evaluate and assess a spill at the Cochise 2 State 4, Unit G, Section 02, Township 19 South, Range 32 East, Lea County, New Mexico (site). The spill site coordinates are N 32.692152 º, W 103.7347785 º. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on October 12, 2017, and released an unknown amount of oil and produced water due to a ruptured flowline. The release occurred in the pasture adjacent to the pad and measured approximately 25' x 50'. As part of an emergency response, the release area was excavated to a depth of 1.0' below surface on October 18, 2017. The excavation was performed to remove the saturated soils and prevent vertical migration of the fluids. Approximately 40 cubic yards of excavated material was hauled for proper disposal. The initial C-141 form is included in Appendix A.

Groundwater

No water wells were listed within Section 02 on the New Mexico Office of the State Engineer's website. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in this area is between 250' and 275' below surface. The groundwater data is shown in Appendix B.

TETRA TECH

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment and Analytical Results

On October 18, 2017, Tetra Tech personnel were onsite to supervise the excavation and to sample the release area. Once the area was excavated to a depth of 1.0' below surface, one backhoe trench (T-1) was installed in the release area to a total depth of 6.0' below excavation bottom (BEB). All of the samples collected were analyzed for TPH analysis by EPA Method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The trench location is shown on Figure 3.

Referring to Table 1, none of the samples showed TPH, benzene, or total BTEX concentrations above the RRALs. A TPH high of 4,157 mg/kg was detected at 2.0' BEB, which declined with depth to 106 mg/kg at 6.0' BEB. The sample collected at 1.0' BEB showed a benzene concentration of 0.0145 mg/kg and a total BTEX concentration of 1.83 mg/kg. The benzene and total BTEX concentrations declined with depth and showed bottom trench concentrations below the laboratory reporting limits.

Additionally, no significant chloride concentrations were detected in the subsurface soils, with a chloride high of 456 mg/kg at 2.0' BEB.

Revegetation Plan

The backfilled areas will be seeded in June 2018 in order to coincide with the rainy season in Southeastern New Mexico to aid in revegetation. Based on the soil type at the site, the BLM seed mixture 2 (Sandy Sites) will be used for seeding and planted in the amount specified in the pounds of pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

TETRA TECH

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The BLM seed mixture details and corresponding pounds pure live seed per acre are included in Appendix C.

Conclusions and Recommendations

None of the samples exceeded the RRALs for TPH, benzene or Total BTEX. Based on the laboratory results, Saber requests closure of this spill issue. The excavated area will be backfilled with clean material to surface grade. The final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment and remediation activities for this site, please call at (432) 682-4559.

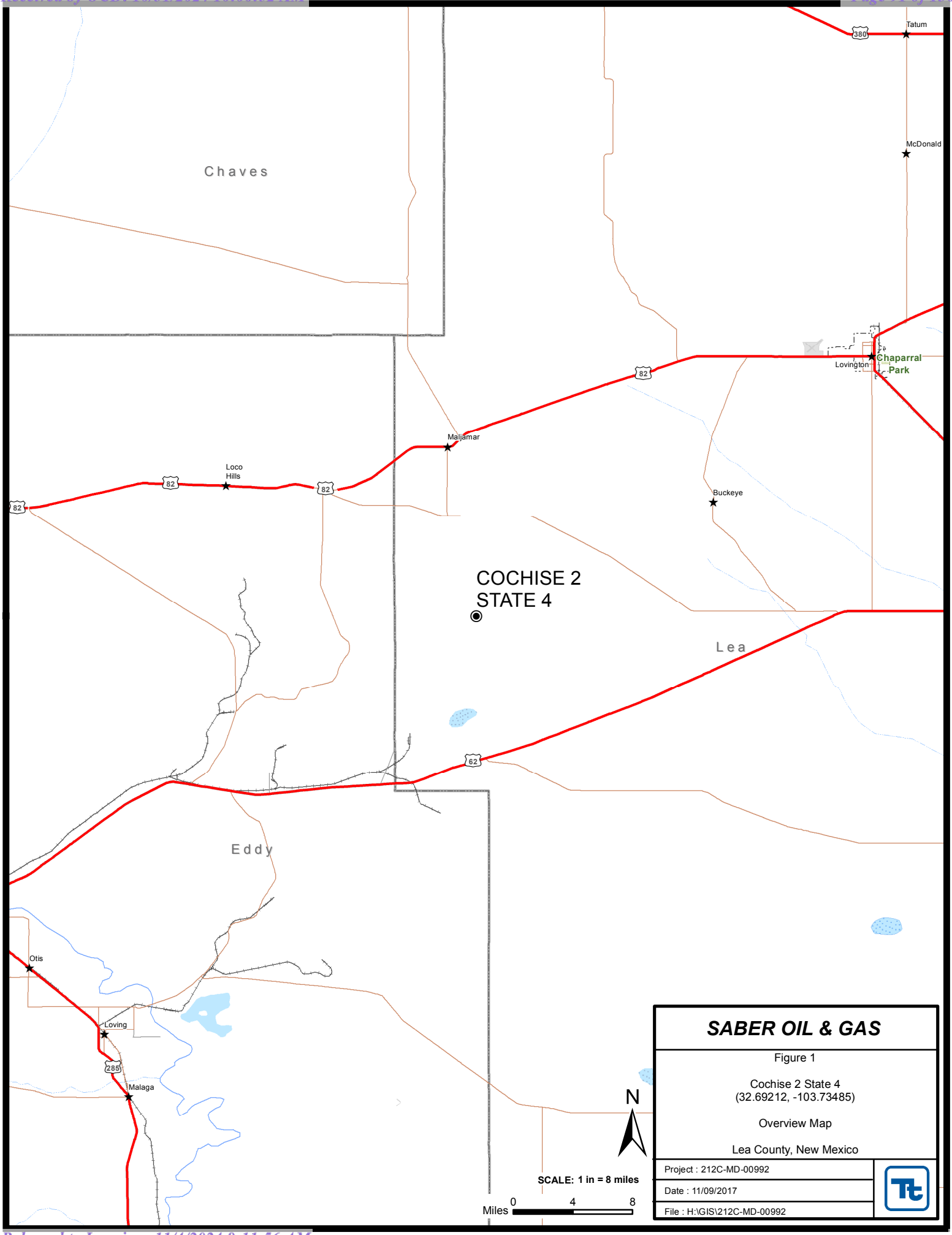
Respectfully submitted,
TETRA TECH

Clair Gonzales,
Geologist

Ike Tavarez,
Senior Project Manager

cc: Nelson Patton – Saber
Doug Keathley - Saber
Amber Groves - SLO

Figures



SABER OIL & GAS

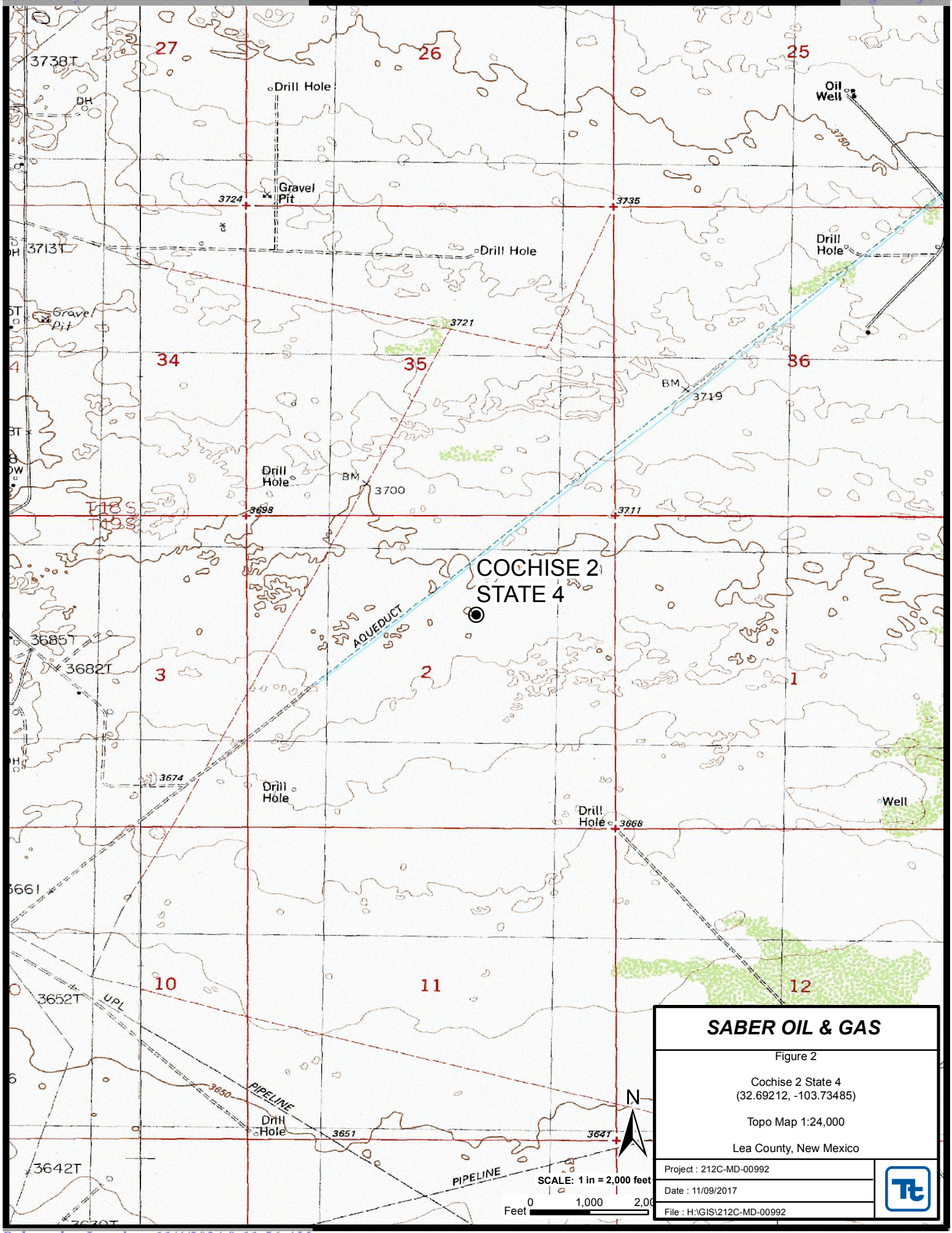
Figure 1

Cochise 2 State 4
(32.69212, -103.73485)

Overview Map

Lea County, New Mexico

Project : 212C-MD-00992	
Date : 11/09/2017	
File : H:\GIS\212C-MD-00992	



SABER OIL & GAS

Figure 2

Cochise 2 State 4
(32.69212, -103.73485)

Topo Map 1:24,000

Lea County, New Mexico

Project : 212C-MD-00992	
Date : 11/09/2017	
File : H:\GIS\212C-MD-00992	


PASTURE
50'
25'
T-1
FLOWLINE
FLOWLINE
WELL
PAD
N
SCALE: 1 IN = 50 FEET
0 25 50
Feet
EXPLANATION
TRENCH SAMPLE LOCATION
SPILL AREA
SABER OIL & GAS
Figure 3
Cochise 2 State 4
(32.69212, -103.73485)
Spill Assessment Map
Lea County, New Mexico
Project : 212C-MD-00992
Date : 11/09/2017
File : H:\GIS\212C-MD-00992

Tables

Table 1
Saber Oil & Gas
Cochise 2 State 4
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	C6-C10	C10-C28	C28-C35	Total						
T-1	10/18/2017	1	1	X		271	3,490	347	4,108	0.0145	0.3720	0.376	1.07	1.83	253
	"	2	1	X		41.2	3,970	146	4,157	<0.00200	0.0613	0.118	0.256	0.435	456
	"	3	1	X		-	-	-	-	-	-	-	-	-	513
	"	4	1	X		-	-	-	-	-	-	-	-	-	319
	"	5	1	X		-	-	-	-	-	-	-	-	-	51.9
	"	6	1	X		<15.0	106	<15.0	106	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	58.4

BEB Below Excavation Bottom
(-) Not Analyzed

Photos

Saber Oil & Gas Ventures, LLC.
Cochise 2 State 4
Lea County, New Mexico

TETRA TECH

View Northwest – Release Area

View Northeast – Excavated Release Area

Saber Oil & Gas Ventures, LLC.
Cochise 2 State 4
Lea County, New Mexico

TETRA TECH

View West – Area of T-1

Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company **Saber Oil and Gas Ventures, LLC**	Contact **Doug Keathley**
Address **400 West Illinois, Midland, TX 79701**	Telephone No. **(432) 685-0169**
Facility Name **Cochise 2 State 4**	Facility Type **Well**

Surface Owner: **State**	Mineral Owner	API No. 30-025-31670

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	2	19S	32E					Lea

Latitude N 32.692152° **Longitude** W 103.7347785 °

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release: Flowline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 10/12/17 Discovered by State Land
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

RECEIVED
By Olivia Yu at 2:25 pm, Oct 16, 2017

Describe Cause of Problem and Remedial Action Taken.*

The release was caused by failed or rupture flowline west of the well. The flowline was repaired and back in service.

Describe Area Affected and Cleanup Action Taken.*

An unknown volume of oil and water was release impacting an area of approximately 25' x 50' in the pasture. The area will be scraped to remove the saturated soil from the area. Once removed, the area will be assessed to define extents. Tetra Tech Environmental has been retained to aid in the remediation.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: Doug Keathley	Approved by District Supervisor: oy
Title: VP of Engineering	Approval Date: 10/16/2017 Expiration Date:
E-mail Address: doug@saberogv.com	Conditions of Approval: see attached directive Attached ☐ ✓
Date: 10/13/2017 Phone: 432-685-0169	

* Attach Additional Sheets If Necessary

1RP-4845 nOY1728952379 pOY1728952628

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
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Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Saber Oil and Gas Ventures, LLC**	Contact **Doug Keathley**
Address **400 West Illinois, Midland, TX 79701**	Telephone No. **(432) 685-0169**
Facility Name **Cochise 2 State 4**	Facility Type **Well**

Surface Owner: **State**	Mineral Owner	API No. 30-025-31670

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	2	19S	32E					Lea

Latitude N 32.692152° **Longitude** W 103.7347785 °

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release Unknown	Volume Recovered None
Source of Release: Flowline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 10/12/17 Discovered by State Land
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

The release was caused by failed or rupture flowline west of the well. The flowline was repaired and back in service. An unknown volume of oil and water was release impacting an area of approximately 25' x 50' in the pasture.

Describe Area Affected and Cleanup Action Taken.*

As a part of an emergency response, the area was excavated to 1.0' below surface to remove the saturated soils and prevent vertical migration. Soil samples were collected to define the spills extents. No soil exceeded the RRAL's. Tetra Tech prepared a closure report and submitted to NMOCD for review.

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Ike Tavarez, P.G.	Approved by District Supervisor:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: ike.tavarez@tetratech.com	Conditions of Approval:	Attached ☐
Date: 11/9/17 Phone: 432-687-8123		

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
Saber Oil & Gas - Cochise 2 State 4
Lea County, New Mexico

18 South 31 East

6	5	4	3	2	1
7	8	9	10	11	12 400
18	17	16	15 98	14 317	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35 261	36

18 South 32 East

6	5	4 65	3	2	1
7 460 82	8	9	10	11	12
18	17	16 84	15	14	13
19	20 164	21	22 429	23	24
30	29	28	27	26	25
31	32	33	34 117	35	36

18 South 33 East

6	5	4	3 60	2	1
7	8 100	9	10 62	11 46	12 143 140
18	17 85	16	15	14 36	13 60
19 >140	20	21	22	23	24 195
30 35	29	28	27	26	25
31	32	33 177	34	35	36

19 South 31 East

6	5 SITE	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19 180	20	21	22	23	24
30	29	28 180	27	26	25
31	32	33 101 140	34	35	36 130

19 South 32 East

6	5	4	3	2	1
7	8 365	9	10	11	12
18	17	16	15	14	13 135 dry
19 102	20 345	21	22	23	24
30	29	28	27	26	25
31	32	33	34 250	35	36

19 South 33 East

6	5	4	3	2	1
7	8	9	10	11	12
18 340	17 116	16	15	14	13
19	20	21	22	23	24
30	29	28 130 dry	27	26 92 85	25
31	32 185	33	34	35	36

20 South 31 East

6	5	4	3	2	1
7	8	9	10 130	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36 80

20 South 32 East

6	5	4	3	2	1 21.8
7	8	9	10	11	12
18 89	17	16	15	14	13
19	20	21	22	23	24
30 9.9	29	28	27 12.3	26	25
31	32	33	34	35	36 46

20 South 33 East

6	5 325 278	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24 +300
30	29	28	27	26	25
31	32	33	34	35	36

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Tetra Tech installed temporary wells and field water level

143 NMOCD Groundwater map well location

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

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

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

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
CP 00075	O	CP	LE		2	4	34	19S	32E	617502	3609301	575		
CP 00563 POD1		CP	LE	1	1	2	19	19S	32E	612118	3613376*	300		
CP 00639 POD1		CP	LE		3	1	20	19S	32E	613029	3612880*	350	345	5
CP 00640 POD1		CP	LE		2	2	19	19S	32E	612621	3613280*	260	102	158
CP 00812 POD1		CP	LE		4	4	01	19S	32E	620623	3616973*	200		
CP 01656 POD1		CP	LE	3	4	3	17	19S	32E	613368	3613646	70		

Average Depth to Water: **223 feet**
Minimum Depth: **102 feet**
Maximum Depth: **345 feet**

Record Count: 6

PLSS Search:

Township: 19S **Range:** 32E

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

Appendix C

BLM SERIAL #:

COMPANY REFERENCE:

3.3 Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed: Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

Appendix D

Analytical Report 566095

for

Tetra Tech- Midland

Project Manager: Ike Tavarez

Saber- Cochis 2 State 4

212C MD 00992

30-OCT-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

30-OCT-17

Project Manager: **Ike Tavarez**
Tetra Tech- Midland
4000 N. Big Spring Suite 401
Midland, TX 79705

Reference: XENCO Report No(s): **566095**
Saber- Cochis 2 State 4
Project Address: Lea Co, NM

Ike Tavarez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 566095. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 566095 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 566095

Tetra Tech- Midland, Midland, TX

Saber- Cochis 2 State 4

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Trench #1 (1') (BEB 1')	S	10-18-17 00:00		566095-001
Trench #1 (2') (BEB 1')	S	10-18-17 00:00		566095-002
Trench #1 (3') (BEB 1')	S	10-18-17 00:00		566095-003
Trench #1 (4') (BEB 1')	S	10-18-17 00:00		566095-004
Trench #1 (5') (BEB 1')	S	10-18-17 00:00		566095-005
Trench #1 (6') (BEB 1')	S	10-18-17 00:00		566095-006

Version: 1.%

CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Saber- Cochis 2 State 4

Project ID: *212C MD 00992*
Work Order Number(s): *566095*

Report Date: *30-OCT-17*
Date Received: *10/20/2017*

Sample receipt non conformances and comments:

566095-006- TPH and BTEX added per Clair Gonzalez e-mail 10/25/17--KB

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3031655 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3031732 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analysis Summary 566095

Tetra Tech- Midland, Midland, TX

Project Name: Saber- Cochis 2 State 4

Project Id: 212C MD 00992
Contact: Ike Tavarez
Project Location: Lea Co, NM

Date Received in Lab: Fri Oct-20-17 11:50 am
Report Date: 30-OCT-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	566095-001		566095-002		566095-003		566095-004		566095-005		566095-006	
	Field Id:	Trench #1 (1') (BEB 1')		Trench #1 (2') (BEB 1')		Trench #1 (3') (BEB 1')		Trench #1 (4') (BEB 1')		Trench #1 (5') (BEB 1')		Trench #1 (6') (BEB 1')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-18-17 00:00		Oct-18-17 00:00		Oct-18-17 00:00		Oct-18-17 00:00		Oct-18-17 00:00		Oct-18-17 00:00	
BTEX by EPA 8021B SUB: TX104704215-17-23	***Extracted:***	Oct-25-17 10:30		Oct-25-17 10:30								Oct-26-17 11:00	
	Analyzed:	Oct-26-17 03:43		Oct-26-17 03:24								Oct-26-17 22:34	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Benzene		0.0145	0.00199	ND	0.00200							ND	0.00200
Toluene		0.372	0.00199	0.0613	0.00200							ND	0.00200
Ethylbenzene		0.376	0.00199	0.118	0.00200							ND	0.00200
m,p-Xylenes		0.692	0.00398	0.151	0.00399							ND	0.00399
o-Xylene		0.377	0.00199	0.105	0.00200							ND	0.00200
Total Xylenes		1.07	0.00199	0.256	0.00200							ND	0.00200
Total BTEX		1.83	0.00199	0.435	0.00200							ND	0.00200
Inorganic Anions by EPA 300/300.1	***Extracted:***	Oct-24-17 10:00		Oct-24-17 10:00		Oct-24-17 10:00		Oct-24-17 10:00		Oct-24-17 10:00		Oct-24-17 12:00	
	Analyzed:	Oct-24-17 18:57		Oct-24-17 21:40		Oct-24-17 21:47		Oct-24-17 21:54		Oct-24-17 22:00		Oct-24-17 22:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		253	4.98	456	4.99	513	4.95	319	4.92	51.9	4.97	58.4	4.94
TPH By SW8015 Mod	***Extracted:***	Oct-20-17 17:00		Oct-20-17 17:00								Oct-25-17 16:00	
	Analyzed:	Oct-21-17 06:51		Oct-21-17 07:10								Oct-26-17 02:52	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Gasoline Range Hydrocarbons		271	74.9	41.2	15.0							ND	15.0
Diesel Range Organics		3490	74.9	3970	15.0							106	15.0
Oil Range Hydrocarbons		347	74.9	146	15.0							ND	15.0

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Kelsey Brooks
Project Manager

Final 1.000

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031144 **Sample:** 566095-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/17 06:51

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.8	117	70-135	
o-Terphenyl	51.4	49.9	103	70-135	

Lab Batch #: 3031144 **Sample:** 566095-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/17 07:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.9	107	70-135	
o-Terphenyl	48.5	50.0	97	70-135	

Lab Batch #: 3031681 **Sample:** 566095-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 02:52

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	99.8	111	70-135	
o-Terphenyl	53.2	49.9	107	70-135	

Lab Batch #: 3031732 **Sample:** 566095-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 03:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0295	0.0300	98	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 3031732 **Sample:** 566095-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 03:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0243	0.0300	81	80-120	
4-Bromofluorobenzene	0.0248	0.0300	83	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031655 **Sample:** 566095-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 22:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 3031144 **Sample:** 7633054-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/21/17 04:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

Lab Batch #: 3031681 **Sample:** 7633364-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 18:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	52.5	50.0	105	70-135	

Lab Batch #: 3031732 **Sample:** 7633241-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 22:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0255	0.0300	85	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 3031655 **Sample:** 7633345-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/17 15:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031144 **Sample:** 7633054-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/21/17 04:28

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	59.8	50.0	120	70-135	

Lab Batch #: 3031681 **Sample:** 7633364-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 19:09

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	100	98	70-135	
o-Terphenyl	48.0	50.0	96	70-135	

Lab Batch #: 3031732 **Sample:** 7633241-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 21:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0274	0.0300	91	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 3031655 **Sample:** 7633345-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/17 13:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0279	0.0300	93	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 3031144 **Sample:** 7633054-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/21/17 04:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	51.8	50.0	104	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031732 **Sample:** 7633241-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/25/17 21:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 3031681 **Sample:** 7633364-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/17 10:19

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	52.3	50.0	105	70-135	

Lab Batch #: 3031655 **Sample:** 7633345-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/26/17 13:36

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0294	0.0300	98	80-120	

Lab Batch #: 3031144 **Sample:** 565936-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/17 05:29

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.7	110	70-135	
o-Terphenyl	53.4	49.9	107	70-135	

Lab Batch #: 3031681 **Sample:** 565000-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/25/17 20:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	99.9	100	70-135	
o-Terphenyl	49.2	50.0	98	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031732 **Sample:** 566212-007 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/25/17 21:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

Lab Batch #: 3031655 **Sample:** 566321-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 13:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0283	0.0300	94	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 3031144 **Sample:** 565936-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/17 05:50

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.9	108	70-135	
o-Terphenyl	49.9	50.0	100	70-135	

Lab Batch #: 3031681 **Sample:** 565000-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/25/17 20:30

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.1	99.9	95	70-135	
o-Terphenyl	48.1	50.0	96	70-135	

Lab Batch #: 3031732 **Sample:** 566212-007 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/25/17 22:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Version: 1.%

Form 2 - Surrogate Recoveries

Project Name: Saber- Cochis 2 State 4

Work Orders : 566095,

Project ID: 212C MD 00992

Lab Batch #: 3031655 **Sample:** 566321-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/26/17 14:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0337	0.0300	112	80-120	
4-Bromofluorobenzene	0.0355	0.0300	118	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Version: 1.%

BS / BSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order #: 566095 **Project ID:** 212C MD 00992

Analyst: ALJ **Date Prepared:** 10/25/2017 **Date Analyzed:** 10/25/2017

Lab Batch ID: 3031732 **Sample:** 7633241-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00202	0.101	0.126	125	0.101	0.125	124	1	70-130	35	
Toluene	<0.00202	0.101	0.124	123	0.101	0.124	123	0	70-130	35	
Ethylbenzene	<0.00202	0.101	0.119	118	0.101	0.121	120	2	71-129	35	
m,p-Xylenes	<0.00404	0.202	0.239	118	0.201	0.242	120	1	70-135	35	
o-Xylene	<0.00202	0.101	0.116	115	0.101	0.118	117	2	71-133	35	

Analyst: ALJ **Date Prepared:** 10/26/2017 **Date Analyzed:** 10/26/2017

Lab Batch ID: 3031655 **Sample:** 7633345-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00200	0.100	0.0958	96	0.0998	0.0867	87	10	70-130	35	
Toluene	<0.00200	0.100	0.101	101	0.0998	0.0908	91	11	70-130	35	
Ethylbenzene	<0.00200	0.100	0.110	110	0.0998	0.0997	100	10	71-129	35	
m,p-Xylenes	<0.00401	0.200	0.216	108	0.200	0.196	98	10	70-135	35	
o-Xylene	<0.00200	0.100	0.108	108	0.0998	0.0977	98	10	71-133	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

BS / BSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order #: 566095 **Project ID:** 212C MD 00992

Analyst: MNV **Date Prepared:** 10/24/2017 **Date Analyzed:** 10/24/2017

Lab Batch ID: 3031338 **Sample:** 7633142-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	250	100	250	249	100	0	90-110	20	

Analyst: MNV **Date Prepared:** 10/24/2017 **Date Analyzed:** 10/24/2017

Lab Batch ID: 3031342 **Sample:** 7633143-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	250	100	250	249	100	0	90-110	20	

Analyst: ARM **Date Prepared:** 10/20/2017 **Date Analyzed:** 10/21/2017

Lab Batch ID: 3031144 **Sample:** 7633054-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons	<15.0	1000	1120	112	1000	1050	105	6	70-135	35	
Diesel Range Organics	<15.0	1000	1120	112	1000	1110	111	1	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

BS / BSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order #: 566095 **Project ID:** 212C MD 00992

Analyst: ARM **Date Prepared:** 10/25/2017 **Date Analyzed:** 10/25/2017

Lab Batch ID: 3031681 **Sample:** 7633364-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons	<15.0	1000	905	91	1000	936	94	3	70-135	35	
Diesel Range Organics	<15.0	1000	1050	105	1000	1100	110	5	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order # : 566095 **Project ID:** 212C MD 00992

Lab Batch ID: 3031655 **QC- Sample ID:** 566321-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/26/2017 **Date Prepared:** 10/26/2017 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.00211	0.100	0.111	109	0.101	0.113	110	2	70-130	35	
Toluene	0.00542	0.100	0.0991	94	0.101	0.0928	87	7	70-130	35	
Ethylbenzene	<0.00201	0.100	0.0881	88	0.101	0.0768	76	14	71-129	35	
m,p-Xylenes	<0.00402	0.201	0.176	88	0.202	0.152	75	15	70-135	35	
o-Xylene	<0.00201	0.100	0.0847	85	0.101	0.0753	75	12	71-133	35	

Lab Batch ID: 3031732 **QC- Sample ID:** 566212-007 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/25/2017 **Date Prepared:** 10/25/2017 **Analyst:** ALJ

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00199	0.0996	0.123	123	0.100	0.112	112	9	70-130	35	
Toluene	<0.00199	0.0996	0.110	110	0.100	0.0992	99	10	70-130	35	
Ethylbenzene	<0.00199	0.0996	0.104	104	0.100	0.0924	92	12	71-129	35	
m,p-Xylenes	<0.00398	0.199	0.213	107	0.200	0.189	95	12	70-135	35	
o-Xylene	<0.00199	0.0996	0.106	106	0.100	0.0953	95	11	71-133	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order # : 566095 **Project ID:** 212C MD 00992

Lab Batch ID: 3031338 **QC- Sample ID:** 566079-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/24/2017 **Date Prepared:** 10/24/2017 **Analyst:** MNV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	143	250	390	99	250	393	100	1	90-110	20	

Lab Batch ID: 3031338 **QC- Sample ID:** 566095-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/24/2017 **Date Prepared:** 10/24/2017 **Analyst:** MNV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	253	249	493	96	249	495	97	0	90-110	20	

Lab Batch ID: 3031342 **QC- Sample ID:** 566095-006 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/24/2017 **Date Prepared:** 10/24/2017 **Analyst:** MNV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	58.4	247	308	101	247	310	102	1	90-110	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: Saber- Cochis 2 State 4

Work Order # : 566095 **Project ID:** 212C MD 00992

Lab Batch ID: 3031342 **QC- Sample ID:** 566207-007 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/25/2017 **Date Prepared:** 10/24/2017 **Analyst:** MNV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	93.5	247	345	102	247	344	101	0	90-110	20	

Lab Batch ID: 3031144 **QC- Sample ID:** 565936-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/21/2017 **Date Prepared:** 10/20/2017 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons	<15.0	997	1040	104	999	1050	105	1	70-135	35	
Diesel Range Organics	<15.0	997	1120	112	999	1110	111	1	70-135	35	

Lab Batch ID: 3031681 **QC- Sample ID:** 565000-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/25/2017 **Date Prepared:** 10/25/2017 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons	<15.0	999	973	97	999	971	97	0	70-135	35	
Diesel Range Organics	69.1	999	1050	98	999	1040	97	1	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

5600095

Client Name: Saber	Site Manager: Ike Tavarez
Project Name: Cochis 2 State 4	
Project Location: (county, state) Lea County, New Mexico	Project #: 212C-MD-00992
Invoice to: Tetra Tech, Inc.	
Receiving Laboratory: Xenco Midland Tx	Sampler Signature: Mike Carmona

Comments: If TPH exceeds 5,000 mg/kg run deeper samples. If Benzene exceeds 10,000 mg/kg or Total BTEX exceeds 50 mg/kg run deeper samples

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2017 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD None	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M GRO - DRO - ORO - MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
	Trench #1 (1') (BEB 1')	10/18/2017			X				X			1	N	X		X												X							
	Trench #1 (2') (BEB 1')	10/18/2017			X				X			1	N	X		X												X							
	Trench #1 (3') (BEB 1')	10/18/2017			X				X			1	N															X							
	Trench #1 (4') (BEB 1')	10/18/2017			X				X			1	N															X							
	Trench #1 (5') (BEB 1')	10/18/2017			X				X			1	N															X							
	Trench #1 (6') (BEB 1')	10/18/2017			X				X			1	N															X							

Relinquished by: mike Date: 10/20/17 Time: 1150
Received by: CM Date: 10/20 Time: 11:50

Relinquished by: Date: Time:
Received by: Date: Time:

Relinquished by: Date: Time:
Received by: Date: Time:

LAB USE ONLY
Sample Temperature

REMARKS:
STANDARD
☐ RUSH: Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Temp: 1.3 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.1

Inter-Office Shipment

IOS Number **1050631**

Date/Time: 10/20/17 12:28
Lab# From: **Midland**
Lab# To: **Houston**

Created by: Connie Hernandez
Delivery Priority:
Air Bill No.:

Please send report to: Kelsey Brooks
Address: 1211 W. Florida Ave, Midland TX 79701
Phone:
E-Mail: kelsey.brooks@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
566095-001	S	Trench #1 (1') (BEB 1')	10/18/17 00:00	SW8260B	VOCs by SW864 8260B	10/26/17	11/01/17	KEB	BDCME BRBZ BRCLME I	
566095-001	S	Trench #1 (1') (BEB 1')	10/18/17 00:00	SW8021B	BTEX by EPA 8021B	10/26/17	11/01/17	KEB	BR4FBZ BZ BZME EBZ X	
566095-002	S	Trench #1 (2') (BEB 1')	10/18/17 00:00	SW8260B	VOCs by SW864 8260B	10/26/17	11/01/17	KEB	BDCME BRBZ BRCLME I	
566095-002	S	Trench #1 (2') (BEB 1')	10/18/17 00:00	SW8021B	BTEX by EPA 8021B	10/26/17	11/01/17	KEB	BR4FBZ BZ BZME EBZ X	

Inter Office Shipment or Sample Comments:

Relinquished By Connie Hernandez

Date Relinquished: 10/20/2017

Received By: _____

Date Received: _____

Cooler Temperature: _____

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 10/20/2017 11:50:00 AM

Work Order #: 566095

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.1
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**Yes**
#18 Water VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Connie Hernandez Date: 10/20/2017

Checklist reviewed by: Kelsey Brooks Date: 10/20/2017

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

QUESTIONS

Action 397734

QUESTIONS

Operator: WALSH & WATTS INC 155 Walsh Drive Aledo, TX 76008	OGRID: 24558
	Action Number: 397734
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nOY1728952379**
Incident Name	**NOY1728952379 COCHISE 2 STATE @ 30-025-31670**
Incident Type	**Oil Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-025-31670] COCHISE 2 STATE #004**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Cochise 2 State
Date Release Discovered	10/12/2017
Surface Owner	State

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Equipment Failure | Pipeline (Any) | Crude Oil | Released: 0 BBL (Unknown Released Amount) | Recovered: 0 BBL | Lost: 0 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	*Not answered.*
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: WALSH & WATTS INC 155 Walsh Drive Aledo, TX 76008	OGRID: 24558
	Action Number: 397734
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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

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

I hereby agree and sign off to the above statement	Name: Alexandra Fleming Title: Regulatory Tech Email: AFleming@walshwatts.com Date: 10/31/2024

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QUESTIONS (continued)

Operator: WALSH & WATTS INC 155 Walsh Drive Aledo, TX 76008	OGRID: 24558
	Action Number: 397734
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	None
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	32
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	10/18/2017
On what date will (or did) the final sampling or liner inspection occur	10/17/2017
On what date will (or was) the remediation complete(d)	10/18/2017
What is the estimated surface area (in square feet) that will be reclaimed	1250
What is the estimated volume (in cubic yards) that will be reclaimed	50
What is the estimated surface area (in square feet) that will be remediated	1250
What is the estimated volume (in cubic yards) that will be remediated	50
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: WALSH & WATTS INC 155 Walsh Drive Aledo, TX 76008	OGRID: 24558
	Action Number: 397734
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Alexandra Fleming Title: Regulatory Tech Email: AFleming@walshwatts.com Date: 10/31/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: WALSH & WATTS INC 155 Walsh Drive Aledo, TX 76008	OGRID: 24558
	Action Number: 397734
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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QUESTIONS (continued)

Operator: WALSH & WATTS INC 155 Walsh Drive Aledo, TX 76008	OGRID: 24558
	Action Number: 397734
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**386769**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**09/27/2024**
What was the (estimated) number of samples that were to be gathered	**8**
What was the sampling surface area in square feet	**1250**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1250
What was the total volume (cubic yards) remediated	50
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	1250
What was the total volume (in cubic yards) reclaimed	1250
Summarize any additional remediation activities not included by answers (above)	Remediation plan was originally denied for no sidewall samples, subsequent sampling from Terracon demonstrates that all previous impacts were remediated to the strictest NMOCD RAL standards and all confirmation samples for the original floor, sidewalls, and deep trench are below NMOCD RALs.

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

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

I hereby agree and sign off to the above statement	Name: Alexandra Fleming Title: Regulatory Tech Email: AFleming@walshwatts.com Date: 10/31/2024

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QUESTIONS (continued)

Operator: WALSH & WATTS INC 155 Walsh Drive Aledo, TX 76008	OGRID: 24558
	Action Number: 397734
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

Action 397734

CONDITIONS

Operator:	OGRID:
WALSH & WATTS INC 155 Walsh Drive Aledo, TX 76008	24558
	Action Number: 397734
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation closure approved.	11/4/2024
amaxwell	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. The OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	11/4/2024