



November 27, 2024
Apache Corporation
303 Veterans Airpark Ln
Midland, TX 79705

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

RE: **Release Investigation, and Closure Report**
Empire ABO Unit #008E
Unit H, Section 16, Township 18 South, Range 27 East
32.7505, -104.2782
Eddy County, New Mexico
Incident ID No. nMCS0219153649

To Whom It May Concern:

Apache Corporation (Apache) became aware of an open incident related to historical oil and gas operations located on New Mexico State Land (NMSLO) from the above-referenced location as shown in Exhibits 1 and 2. A release at this location was originally discovered on June 21, 2002, and was found to have impacted the right-of-way. Impacted soil was treated at the time of discovery with fertilizer. Surface ownership is held by the NMSLO. Since the release was assumed to be less than 25 bbls the New Mexico Oil Conservation District (NMOCD) was notified of the release at the time, but because of the age of the incident, a C-141 was not filed.

Regulatory Criteria

A review of data from the New Mexico Office of the State Engineer (NMOSE) website identified a water well RA-12433 located approximately 0.93 miles northeast of the site (Exhibit 4). This groundwater well was completed to a depth of 35 feet below ground surface (bgs) in 2016, with an assumed depth to water of 15 to 35 feet bgs. A review of the U.S. Fish and Wildlife Service, National Wetlands Inventory website indicates that there are riverine wetlands within a half mile of the site (Exhibit 5). A review of geospatial data obtained from the BLM Carlsbad Field Office website indicated that the site is within an area of high risk for karst formations, as seen in the Karst Map Exhibit 6. Per New Mexico Administrative Code (NMAC) 19.15.29.12, remediation and closure criteria for a depth to groundwater less than 50 feet below grade surface (bgs) were utilized for this release.

Soil Sampling Activities

On November 22, 2024, Terracon mobilized to the site to collect samples from the formerly impacted area of the release. See Exhibit 3 for a depiction of the delineation grab sample locations. Photographs of the project site are included in Exhibit 7.

Nineteen soil samples were collected from five hand auger locations and were analyzed for BTEX, Benzene, TPH, and Chlorides. BTEX, Benzene, and TPH for all samples were reported

Explore with us

Closure Documentation
Empire ABO Unit #008E | Eddy County, New Mexico
November 26, 2024 | Terracon Project No. KH247056



to be below laboratory detection limits. Chloride was detected above laboratory detection limits but was reported below the closure criteria of 600 mg/kg for all samples. Analytical results are summarized in Table 1. Laboratory reports and chains of custody are presented in Appendix 1.

Conclusion

In accordance with NMAC 19.15.29.12, remediation of the impacted material is complete, and Apache respectfully requests closure of the reportable incident that occurred on June 21, 2002, at the Empire ABO Unit #008E - nMCS0219153649 location.

We at Terracon are deeply grateful for the opportunity to offer our environmental services to Apache. 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:

A handwritten signature in blue ink, appearing to read 'Joe Guesnier', is written over the printed name.

Joseph Guesnier
Office Manager
Carlsbad

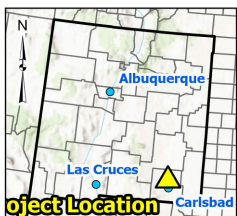
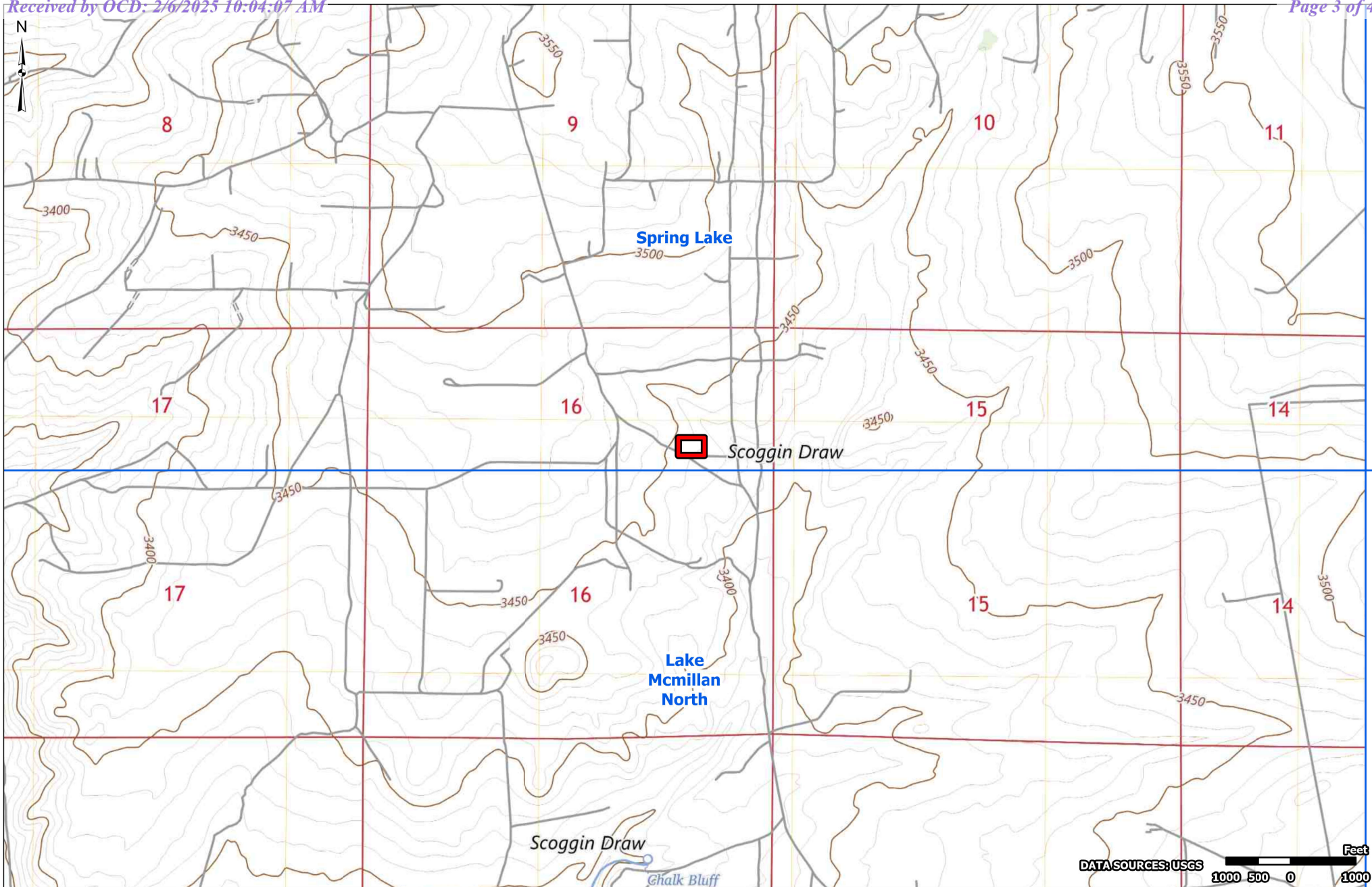
Reviewed by:

A handwritten signature in blue ink, appearing to read 'Austin W. Grams', is written over the printed name. To the left of the signature is a small handwritten word 'for'.

John Grams, P.G. (TX)
Senior Project Manager
Lubbock

Attachments

Exhibit 1 – Topographic Map
Exhibit 2 – Site Map
Exhibit 3 – Site Sample Map
Exhibit 4 – NMOSE POD Location Map
Exhibit 5 – Designated Wetlands Map
Exhibit 6 – Karst Map
Exhibit 7 – Photographic Log
Table 1 – Soil Analytical Results Summary – Release Assessment
Laboratory Analytical Report and Chain of Custody



Site Boundary

Project No.:
KH247056
Date:
Nov 21 2024
Drawn By:
JWL
Reviewed By:
JRG



4526 W Pierce St
Carlsbad, NM

PH. 806-300-0140

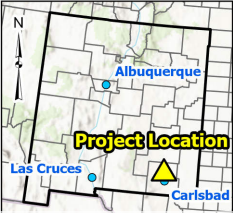
terracon.com

Topographic Map

Empire ABO Unit #008E
32.7505112, -104.2781754
Apache Corporation


Exhibit

1



 Site Boundary

Project No.:
KH247056
Date:
Nov 21 2024
Drawn By:
JWL
Reviewed By:
JRG



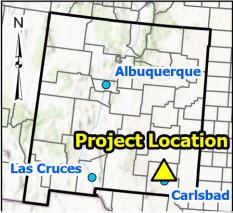
4526 W Pierce St
Carlsbad, NM

PH. 806-300-0140 terracon.com

Site Location Map
Empire ABO Unit #008E 32.7505112,-104.2781754 Apache Corporation

Exhibit
2

C:\GIS\Projects\KH247056\Map\KH247056_Empire_ABO_Unit_008E\KH247056_Empire_ABO_Unit_008E.aprx




 Sample Location

Project No.:
KH247056

Date:
Nov 21 2024

Drawn By:
JWL

Reviewed By:
JRG


4526 W Pierce St
Carlsbad, NM

PH. 806-300-0140 terracon.com

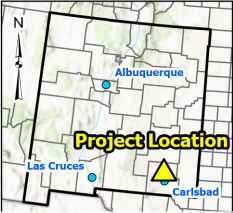
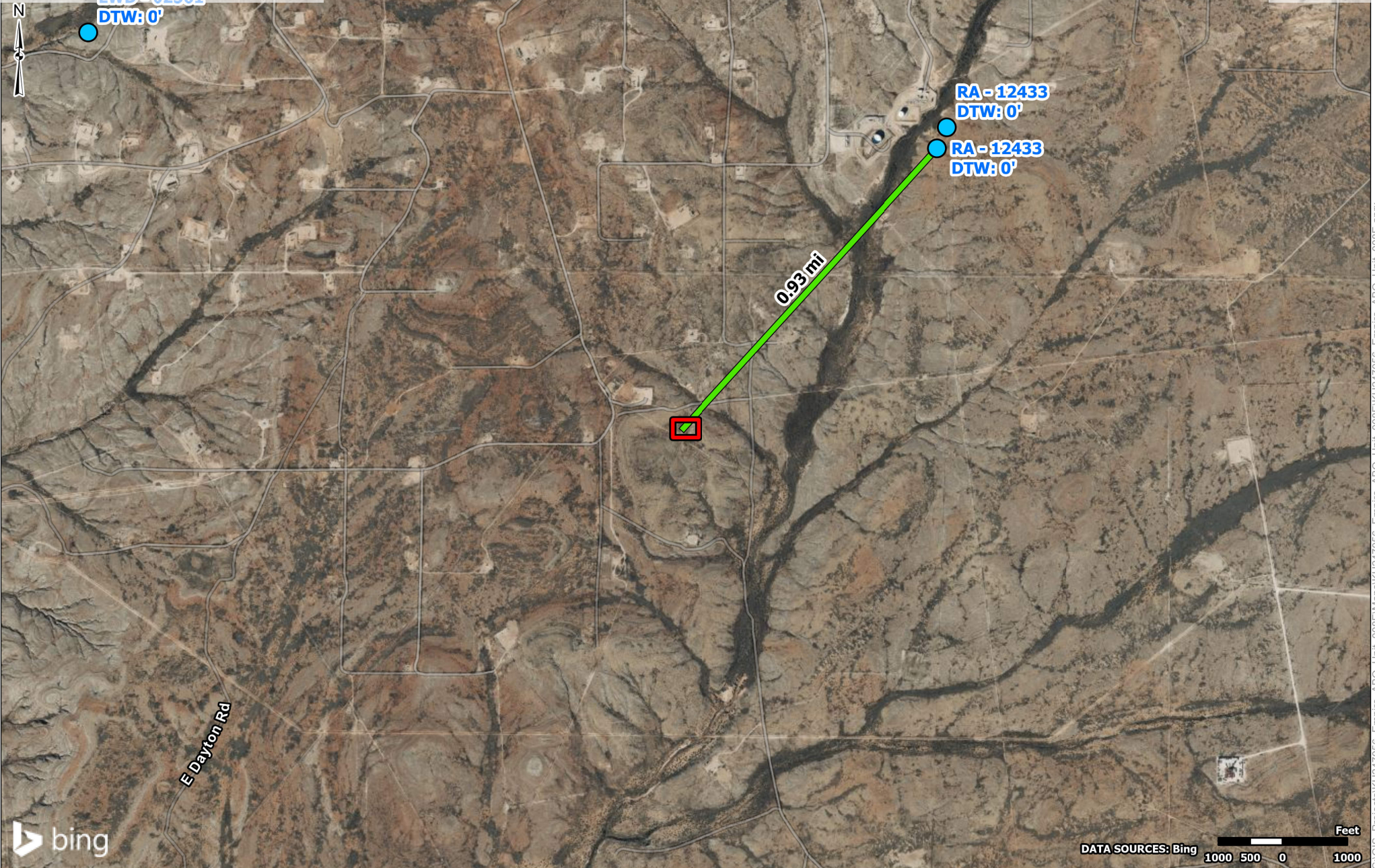
Sample Location Map

Empire ABO Unit #008E
32.7505112,-104.2781754
Apache Corporation

Exhibit

3

C:\GIS\Projects\KH247056\Empire ABO Unit 008E\Maps\KH247056_Empire ABO Unit 008E.aprx



- Site Boundary
- NMOSE POD Location

Project No.:
KH247056
Date:
Nov 21 2024
Drawn By:
JWL
Reviewed By:
JRG

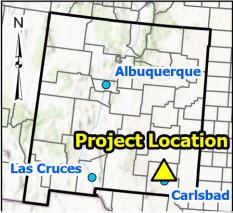
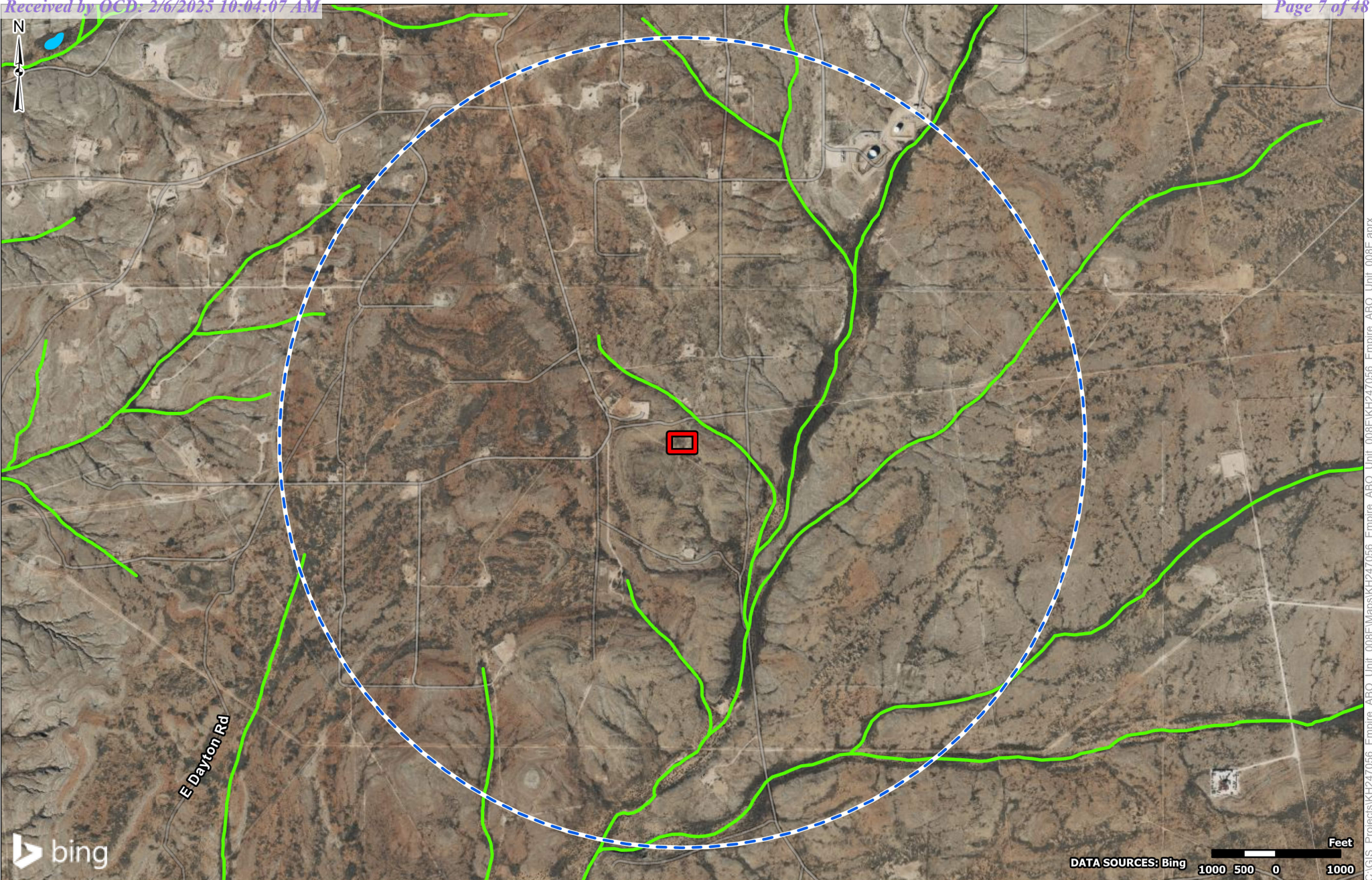
4526 W Pierce St
Carlsbad, NM
PH. 806-300-0140 terracon.com

NMOSE POD Location Map

Empire ABO Unit #008E
32.7505112,-104.2781754
Apache Corporation

Exhibit

4




- Site Boundary
- 1-Mile Radius
- Freshwater Emergent Wetland
- Riverine

Project No.:
KH247056

Date:
Nov 21 2024

Drawn By:
JWL

Reviewed By:
JRG

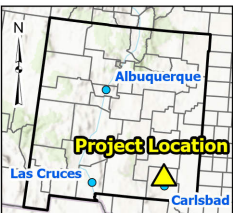
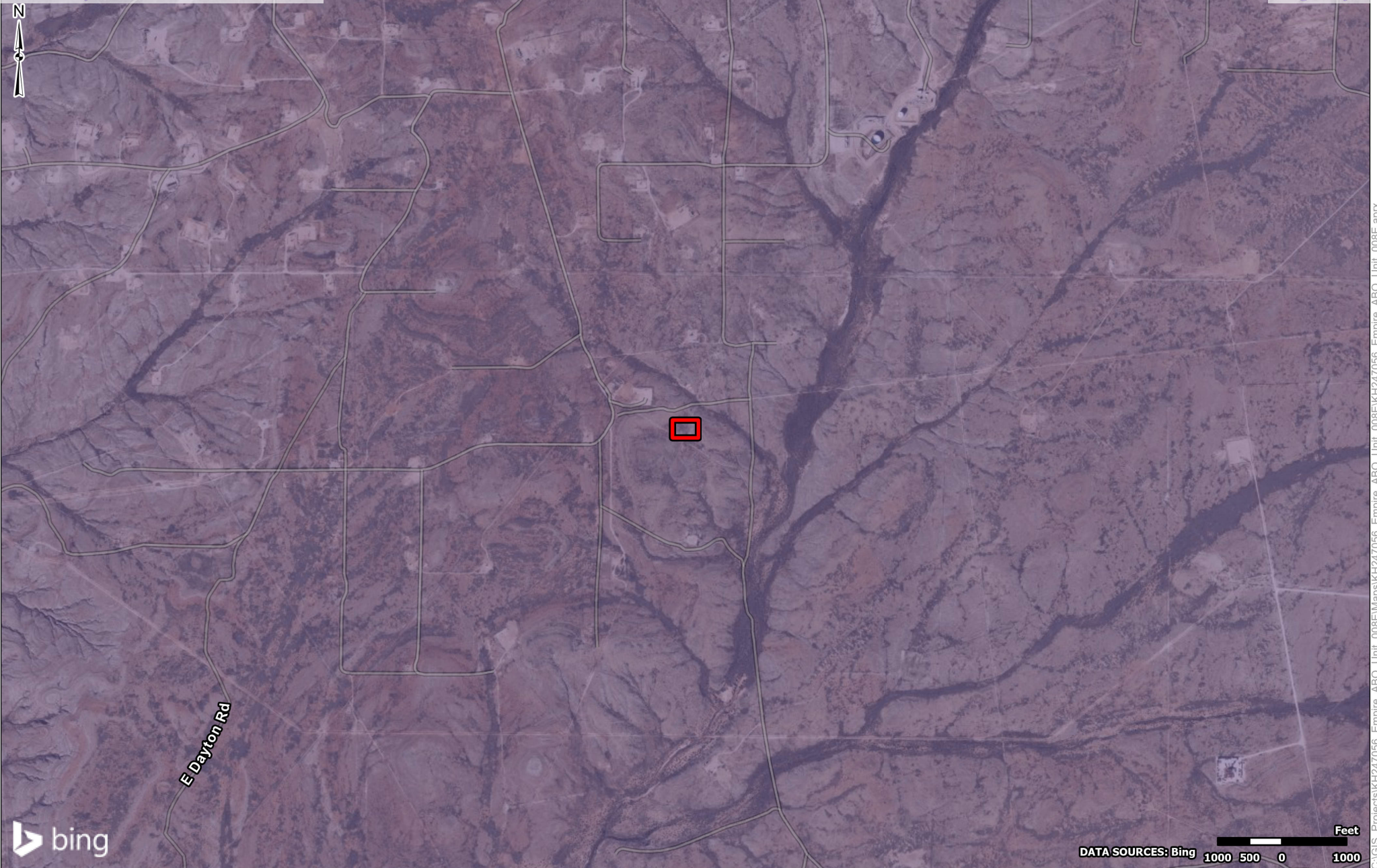

4526 W Pierce St
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PH. 806-300-0140 terracon.com

Designated Wetland Area Map

Empire ABO Unit #008E
32.7505112,-104.2781754
Apache Corporation

Exhibit

5



- Site Boundary
- Karst Potential
 - Low
 - Medium
 - High

Project No.:
KH247056
Date:
Nov 21 2024
Drawn By:
JWL
Reviewed By:
JRG

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

Cave Karst Public UCP Map

Empire ABO Unit #008E
32.7505112,-104.2781754
Apache Corporation

Exhibit

6



Photo 1

Point of SP1



Photo 2

Point of SP2



Photo 3

Point of SP3




Photo 4

Point of SP4



Photo 5

Point of SP5

Table 1 Soil Analytical Results Summary - Release Assessment Project Code: KH247056 NMOCD Reference No. nMCS0219153645											
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 Assessment Samples											
SP1	11/22/2024	0 - 1	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
	11/22/2024	1 - 2	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
	11/22/2024	2 - 3	Grab	In-Situ	16	ND	ND	ND	ND	ND	ND
	11/22/2024	3 - 4	Grab	In-Situ	16	ND	ND	ND	ND	ND	ND
SP2	11/22/2024	0 - 1	Grab	In-Situ	48	ND	ND	ND	ND	ND	ND
	11/22/2024	1 - 2	Grab	In-Situ	16	ND	ND	ND	ND	ND	ND
	11/22/2024	2 - 3	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
	11/22/2024	3 - 4	Grab	In-Situ	16	ND	ND	ND	ND	ND	ND
SP3	11/22/2024	0 - 1	Grab	In-Situ	240	ND	ND	ND	ND	ND	ND
	11/22/2024	1 - 2	Grab	In-Situ	304	ND	ND	ND	ND	ND	ND
	11/22/2024	2 - 3	Grab	In-Situ	176	ND	ND	ND	ND	ND	ND
	11/22/2024	3 - 4	Grab	In-Situ	16	ND	ND	ND	ND	ND	ND
SP4	11/22/2024	0 - 1	Grab	In-Situ	48	ND	ND	ND	ND	ND	ND
	11/22/2024	1 - 2	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
	11/22/2024	2 - 3	Grab	In-Situ	16	ND	ND	ND	ND	ND	ND
	11/22/2024	3 - 4	Grab	In-Situ	48	ND	ND	ND	ND	ND	ND
SP3	11/22/2024	0 - 1	Grab	In-Situ	ND	ND	ND	ND	ND	ND	ND
	11/22/2024	1 - 2	Grab	In-Situ	ND	ND	ND	ND	ND	ND	ND
	11/22/2024	2 - 3	Grab	In-Situ	ND	ND	ND	ND	ND	ND	ND
NMOCD Reclamation Standards ³ (Surface to 4 ft bgs)					600	10	50	100	N/A		NA
NMOCD Remediation Standards ⁴ (Greater than Depths of 4 ft bgs)					600	10	50	100	N/A		NA
1. BTEX = Benzene, Toluene, Ethylbenzene, and total Xylenes 2. TPH = Total Petroleum Hydrocarbons 3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegetation (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 Applicable Bold denotes concentrations above applicable laboratory SDLs. Bold and Highlighted values 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 permitted disposal facility.								Data Entry:			
								Reviewed By:			
								 Explore with us			



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

November 25, 2024

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: EMPIRE ABO UNIT #008E

Enclosed are the results of analyses for samples received by the laboratory on 11/22/24 14:03.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Snyder".

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 1 (0-1') (H247183-01)

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	11/23/2024	ND	2.05	102	2.00	0.987		
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80		
Total BTEX	<0.300	0.300	11/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/25/2024	ND	448	112	400	3.51		

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	11/22/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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



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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 1 (1-2') (H247183-02)

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	11/23/2024	ND	2.05	102	2.00	0.987	
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80	
Total BTEX	<0.300	0.300	11/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.6 % 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	11/25/2024	ND	448	112	400	3.51		

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	11/22/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 90.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.4 % 49.1-148

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*=Accredited Analyte

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



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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 1 (2-3') (H247183-03)

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	11/23/2024	ND	2.05	102	2.00	0.987	
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80	
Total BTEX	<0.300	0.300	11/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 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	11/25/2024	ND	448	112	400	3.51	

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	11/22/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 91.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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



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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 1 (3-4') (H247183-04)

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	11/23/2024	ND	2.05	102	2.00	0.987	
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80	
Total BTEX	<0.300	0.300	11/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 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	11/25/2024	ND	448	112	400	3.51	

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	11/22/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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



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

Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 2 (0-1') (H247183-05)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/23/2024	ND	2.05	102	2.00	0.987		
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80		
Total BTX	<0.300	0.300	11/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.5 % 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	48.0	16.0	11/25/2024	ND	448	112	400	3.51		

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	11/22/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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



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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 2 (1-2') (H247183-06)

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	11/23/2024	ND	2.05	102	2.00	0.987	
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80	
Total BTEx	<0.300	0.300	11/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 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	11/25/2024	ND	448	112	400	3.51	

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	11/22/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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



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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 2 (2-3') (H247183-07)

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	11/23/2024	ND	2.05	102	2.00	0.987		
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80		
Total BTEX	<0.300	0.300	11/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.7 % 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	11/25/2024	ND	448	112	400	3.51		

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	11/22/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 2 (3-4') (H247183-08)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/23/2024	ND	2.05	102	2.00	0.987	
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80	
Total BTX	<0.300	0.300	11/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 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	11/25/2024	ND	448	112	400	3.51	

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	11/23/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/23/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/23/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 3 (0-1') (H247183-09)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/23/2024	ND	2.05	102	2.00	0.987		
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80		
Total BTX	<0.300	0.300	11/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 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	240	16.0	11/25/2024	ND	448	112	400	3.51	

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	11/23/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/23/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/23/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 3 (1-2') (H247183-10)

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	11/23/2024	ND	2.05	102	2.00	0.987		
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80		
Total BTEX	<0.300	0.300	11/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	11/25/2024	ND	448	112	400	3.51		

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	11/23/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/23/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/23/2024	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 3 (2-3') (H247183-11)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/23/2024	ND	2.05	102	2.00	0.987		
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80		
Total BTX	<0.300	0.300	11/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	11/25/2024	ND	448	112	400	3.51		

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	11/23/2024	ND	216	108	200	1.99	
DRO >C10-C28*	<10.0	10.0	11/23/2024	ND	218	109	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	11/23/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 49.1-148

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



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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 3 (3-4') (H247183-12)

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	11/23/2024	ND	2.05	102	2.00	0.987		
Toluene*	<0.050	0.050	11/23/2024	ND	1.96	98.0	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	1.96	98.1	2.00	2.03		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	5.82	97.1	6.00	1.80		
Total BTEX	<0.300	0.300	11/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 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	11/25/2024	ND	448	112	400	3.51		

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	11/22/2024	ND	203	101	200	0.204	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	211	105	200	0.294	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 92.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.1 % 49.1-148

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



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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 4 (0-1') (H247183-13)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/23/2024	ND	2.19	110	2.00	2.95		
Toluene*	<0.050	0.050	11/23/2024	ND	2.25	112	2.00	3.81		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.16	108	2.00	4.11		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.91	115	6.00	3.18		
Total BTEX	<0.300	0.300	11/23/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	11/25/2024	ND	448	112	400	3.51		

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	11/22/2024	ND	203	101	200	0.204	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	211	105	200	0.294	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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



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

Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 4 (1-2') (H247183-14)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/23/2024	ND	2.19	110	2.00	2.95		
Toluene*	<0.050	0.050	11/23/2024	ND	2.25	112	2.00	3.81		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.16	108	2.00	4.11		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.91	115	6.00	3.18		
Total BTEX	<0.300	0.300	11/23/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/25/2024	ND	448	112	400	3.51		

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	11/22/2024	ND	203	101	200	0.204	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	211	105	200	0.294	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 4 (2-3') (H247183-15)

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	11/23/2024	ND	2.19	110	2.00	2.95		
Toluene*	<0.050	0.050	11/23/2024	ND	2.25	112	2.00	3.81		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.16	108	2.00	4.11		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.91	115	6.00	3.18		
Total BTEX	<0.300	0.300	11/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 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	11/25/2024	ND	448	112	400	3.51		

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	11/22/2024	ND	203	101	200	0.204	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	211	105	200	0.294	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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



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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 4 (3-4') (H247183-16)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/23/2024	ND	2.19	110	2.00	2.95		
Toluene*	<0.050	0.050	11/23/2024	ND	2.25	112	2.00	3.81		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.16	108	2.00	4.11		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.91	115	6.00	3.18		
Total BTX	<0.300	0.300	11/23/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	11/25/2024	ND	448	112	400	3.51		

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	11/22/2024	ND	203	101	200	0.204	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	211	105	200	0.294	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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



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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 5 (0-1') (H247183-17)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/23/2024	ND	2.19	110	2.00	2.95		
Toluene*	<0.050	0.050	11/23/2024	ND	2.25	112	2.00	3.81		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.16	108	2.00	4.11		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.91	115	6.00	3.18		
Total BTEX	<0.300	0.300	11/23/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/25/2024	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	11/22/2024	ND	203	101	200	0.204	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	211	105	200	0.294	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 89.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.8 % 49.1-148

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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 5 (1-2') (H247183-18)

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	11/23/2024	ND	2.19	110	2.00	2.95		
Toluene*	<0.050	0.050	11/23/2024	ND	2.25	112	2.00	3.81		
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.16	108	2.00	4.11		
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.91	115	6.00	3.18		
Total BTEx	<0.300	0.300	11/23/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/25/2024	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	11/22/2024	ND	203	101	200	0.204	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	211	105	200	0.294	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Analytical Results For:

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

Received: 11/22/2024
 Reported: 11/25/2024
 Project Name: EMPIRE ABO UNIT #008E
 Project Number: KH247056
 Project Location: APACHE -

Sampling Date: 11/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: SP 5 (2-3') (H247183-19)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/23/2024	ND	2.19	110	2.00	2.95	
Toluene*	<0.050	0.050	11/23/2024	ND	2.25	112	2.00	3.81	
Ethylbenzene*	<0.050	0.050	11/23/2024	ND	2.16	108	2.00	4.11	
Total Xylenes*	<0.150	0.150	11/23/2024	ND	6.91	115	6.00	3.18	
Total BTX	<0.300	0.300	11/23/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/25/2024	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	11/22/2024	ND	203	101	200	0.204	
DRO >C10-C28*	<10.0	10.0	11/22/2024	ND	211	105	200	0.294	
EXT DRO >C28-C36	<10.0	10.0	11/22/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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



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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

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A handwritten signature in black ink, appearing to read "Mike Snyder", is written over a horizontal line.

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



Office Location

Lubbock

Project Manager

Joseph Guesnier

Sampler's Name

Jack Kirkpatrick

Phone:

Contact:

(806)787-0744

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Sampler's Signature

[Signature]

Project Number

KH247056

Project Name

Empire ABO Unit #008E

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth (FT)	End Depth (FT)	No. Type of Containers
--------	------	------	------	------	--------------------------------	------------------	----------------	------------------------

S	11/22/2024	1000		X	SP1 (0-1')	0	1	X
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S	11/22/2024	1003		X	SP1 (1-2')	1	2	X
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S	11/22/2024	1007		X	SP1 (2-3')	2	3	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1013		X	SP1 (3-4')	3	4	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1015		X	SP2 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1020		X	SP2 (1-2')	1	2	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1025		X	SP2 (2-3')	2	3	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1030		X	SP2 (3-4')	3	4	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
---	------------	------	--	---	------------	---	---	---

S	11/22/2024	1045		X	SP3 (0-1')	0	1	X
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CHAIN OF CUSTODY RECORD

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:

TEMP OF COOLER WHEN RECEIVED (°C)

0.8-10-04
0.02-11-10

Page 1 of 3

Lab Sample ID

4247183

Lab Sample ID

4247183

Lab Sample ID

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Lab Sample ID

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Lab Sample ID

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Lab Sample ID



Office Location

Lubbock

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

ANALYSIS
REQUESTED

LAB USE ONLY
DUE DATE:

Project Manager

Joseph Guesnier

Phone:

(806)787-0744

Sampler's Name

Jack Kirkpatrick

Sampler's Signature

Page 2 of 3

Project Number

KH247056

Project Name

Empire ABO Unit #008E

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth (FT)	End Depth (FT)	No. Type of Containers	TPH (EXT 8015)	BTEX (EPA 8021B)	Chloride (EPA 4500)	Lab Sample ID
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S 11/22/2024 1050 X X SP3 (1-2') 1 2 X X X

S 11/22/2024 1055 X X SP3 (2-3') 2 3 X X X

S 11/22/2024 1100 X X SP3 (3-4') 3 4 X X X

S 11/22/2024 1102 X X SP4 (0-1') 0 1 X X X

S 11/22/2024 1106 X X SP4 (1-2') 1 2 X X X

S 11/22/2024 1110 X X SP4 (2-3') 2 3 X X X

S 11/22/2024 1114 X X SP4 (3-4') 3 4 X X X

S 11/22/2024 1120 X X SP5 (0-1') 0 1 X X X

S 11/22/2024 1126 X X SP5 (1-2') 1 2 X X X

TURNAROUND TIME

11/22/2024

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Relinquished by (Signature)

11/22/24

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Page 24 of 24

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>15</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Barrett W. Bole Title: Environmental Supervisor
Signature: Barrett W. Bole Date: 02/06/2025
email: barrett.bole@apachecorp.com Telephone: 432.818.1108

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Barrett W. Bole Title: Environmental Supervisor
Signature: Barrett W. Bole Date: 02/06/2025
email: barrett.bole@apachecorp.com Telephone: 432.818.1108

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 429059

QUESTIONS

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 429059
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nMCS0219153649
Incident Name	NMCS0219153649 EMPIRE ABO #8 EAST @ 30-015-00910
Incident Type	Oil Release
Incident Status	Re-vegetation Report Received
Incident Well	[30-015-00910] EMPIRE ABO UNIT #008E

Location of Release Source*Please answer all the questions in this group.*

Site Name	Empire ABO #8 East
Date Release Discovered	06/21/2002
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: Corrosion Flow Line - Production 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.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

QUESTIONS, Page 2

Action 429059

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 429059
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

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: Barrett Bole Title: EH&S Supervisor Email: barrett.bole@apachecorp.com Date: 02/06/2025
--	--

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 3

Action 429059

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 429059
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Site Characterization	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Less than or equal 25 (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	Greater than 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 ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between ½ and 1 (mi.)
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<i>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.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>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.</i>	
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)	304
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
<i>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>	
On what estimated date will the remediation commence	11/22/2024
On what date will (or did) the final sampling or liner inspection occur	11/22/2024
On what date will (or was) the remediation complete(d)	11/22/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	0
<i>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.</i>	
<i>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.</i>	

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Oil Conservation Division
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QUESTIONS, Page 4

Action 429059

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 429059
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Remediation Plan (continued)	
<i>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.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	<i>Not answered.</i>
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	<i>Not answered.</i>
(In Situ) Soil Vapor Extraction	<i>Not answered.</i>
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<i>Not answered.</i>
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	<i>Not answered.</i>
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<i>Not answered.</i>
Ground Water Abatement pursuant to 19.15.30 NMAC	<i>Not answered.</i>
OTHER (Non-listed remedial process)	Yes
Other Non-listed Remedial Process. Please specify	Historical spill from 2002. Oily soil likely removed. No evidence of current impact. Any residual likely naturally attenuated
<i>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>	
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: Barrett Bole Title: EH&S Supervisor Email: barrett.bole@apachecorp.com Date: 02/06/2025
<i>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.</i>	

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Action 429059

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 429059
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

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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Action 429059

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 429059
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	404804
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/22/2024
What was the (estimated) number of samples that were to be gathered	25
What was the sampling surface area in square feet	2500

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
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	2000
What was the total volume (cubic yards) remediated	25
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	Collected soil samples with hand augers to verify contaminants did not exceed State action levels
<i>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>	
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: Barrett Bole Title: EH&S Supervisor Email: barrett.bole@apachecorp.com Date: 02/06/2025

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QUESTIONS, Page 7

Action 429059

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 429059
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Reclamation Report	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	0
What was the total volume of replacement material (in cubic yards) for this site	0
<i>Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a 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.</i>	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseedling commence(d)	06/01/2010
Summarize any additional reclamation activities not included by answers (above)	Site naturally attenuated over time and has substantial re-growth of vegetation
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseedling plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</i>	
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: Barrett Bole Title: EH&S Supervisor Email: barrett.bole@apachecorp.com Date: 02/06/2025

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Action 429059

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 429059
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

QUESTIONS

Revegetation Report	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	Yes
What was the total revegetation surface area (in square feet) for this site	2000
<i>Per Paragraph (2) of Subsection D of 19.15.29.13 NMAC the responsible party must reseed disturbed area in the first favorable growing season following closure of the site.</i>	
On what date did the reseeded commence	06/01/2010
On what date was the vegetative cover inspected	11/22/2024
What was the life form ratio compared to pre-disturbance levels	50
What was the total percent plant cover compared to pre-disturbance levels	75
Summarize any additional revegetation activities not included by answers (above)	Site was allowed to naturally re-vegetate
<i>The responsible party must attach information demonstrating they have complied with all applicable re-vegetation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any life form ratio and percent plant cover sampling diagrams or other relevant field notes, photographs of re-vegetated areas, and a narrative of the re-vegetation activities. Refer to 19.15.29.13 NMAC.</i>	
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: Barrett Bole Title: EH&S Supervisor Email: barrett.bole@apachecorp.com Date: 02/06/2025
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 429059

CONDITIONS

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 429059
	Action Type: [C-141] Revegetation Report C-141 (C-141-v-Revegetation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NMCS0219153649 EMPIRE ABO UNIT #008E, thank you. This Remediation Closure Report is approved.	2/13/2025