State of New Mexico
Oil Conservation Division

Incident ID	nAPP2302744797
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: Connor Walker Title: Sr. Engineer

Signature: _____ Date: 2/23/2023

email: cwalker@mewbourne.com Telephone: (806)202-5281

OCD Only

Received by: Jocelyn Harimon Date: 02/23/2023

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

Closure Approved by: Robert Hamlet Date: 6/23/2023

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

Incident ID	nAPP2302744797
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?	125 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☑ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☑ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2302744797
District RP	
Facility ID	
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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: Connor Walker Title: Sr. Engineer

Signature:  Date: 2/23/2023

email: cwalker@mewbourne.com Telephone: (806)202-5281

OCD Only

Received by: Jocelyn Harimon Date: 02/23/2023

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2302744797
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Closure

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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: Connor Walker Title: Sr. Engineer

Signature:  Date: 2/23/2023

email: cwalker@mewbourne.com Telephone: (806)202-5281

OCD Only

Received by: Jocelyn Harimon Date: 02/23/2023

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Remediation Summary & Soil Closure Request

Mewbourne Oil Company
Viper 32-29 W2PI Fed Com #1H
Eddy County, New Mexico
Unit Letter "P", Section 32, Township 23 South, Range 27 East
Latitude 32.2546560 North, Longitude 104.207808 West
NMOCD Reference No. nAPP2302744797

Prepared By:

Etech Environmental & Safety Solutions, Inc.
6309 Indiana Ave, Ste. D
Lubbock, Texas 79413

Ben J. Arguijo

Lance Crenshaw

ETECH Environmental & Safety Solutions, Inc.

Midland • San Antonio • Lubbock • Hobbs • Lafayette

TABLE OF CONTENTS

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Mewbourne Oil Company, has prepared this *Remediation Summary & Soil Closure Request* for the release site known as the Viper 32-29 W2PI Fed Com #1H (henceforth, "Viper 32-29"). Details of the release are summarized below:

Location of Release Source

Latitude: 32.2546560 Longitude: -104.207808

Provided GPS are in WGS84 format.

Site Name:	Viper 32-29 W2PI Fed Com #1H	Site Type:	Tank Battery
Date Release Discovered:	1/16/2023	API # (if applicable):	30-015-44075

Unit Letter	Section	Township	Range	County
"P"	32	23S	27E	Eddy

Surface Owner: [X] State [ ] Federal [ ] Tribal [ ] Private (Name _____)

Nature and Volume of Release

[X] Crude Oil	Volume Released (bbls)	4	Volume Recovered (bbls)	0
[X] Produced Water	Volume Released (bbls)	10	Volume Recovered (bbls)	0
	Is the concentration of total dissolved solids (TDS) in the produced water > 10,000 mg/L?		[X] Yes [ ] No [ ] N/A	
[ ] Condensate	Volume Released (bbls)		Volume Recovered (bbls)	
[ ] Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)	
[ ] Other (describe)	Volume/Weight Released		Volume/Weight Recovered	

Cause of Release:
The heater treater on location lost gas supply, and fluid was sent to the flare.

Initial Response

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

Previously submitted portions of the NMOCD Form C-141 are available in the NMOCD Imaging System.

2.0 SITE CHARACTERIZATION

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half-mile radius of the Viper 32-29 release site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided as Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	125'
Did the release impact groundwater or surface water?	[ ] Yes [X] No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	[ ] Yes [X] No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark?	[ ] Yes [X] No
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	[ ] Yes [X] No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	[ ] Yes [X] No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	[ ] Yes [X] No
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	[ ] Yes [X] No
Are the lateral extents of the release within 300 feet of a wetland?	[ ] Yes [X] No
Are the lateral extents of the release overlying a subsurface mine?	[ ] Yes [X] No
Are the lateral extents of the release overlying an unstable area such as karst geology?	[X] Yes [ ] No
Are the lateral extents of the release within a 100-year floodplain?	[ ] Yes [X] No
Did the release impact areas not on an exploration, development, production or storage site?	[ ] Yes [X] No

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) and Fish & Wildlife Services (FWS) shapefiles, topographic maps, NMOSE and USGS databases, and aerial imagery. The results are depicted in Figures 1, 2, 4, and 5.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Based on the volume and nature of the release, inferred depth to groundwater, and NMOCD Siting Criteria, the NMOCD Closure Criteria and NMOCD Reclamation Standards for the Viper 32-29 release site are as follows:

Probable Depth to Groundwater	Constituent	Laboratory Analytical Method	Closure Criteria*†	Reclamation Standard*‡
125'	Chloride (Cl-)	EPA 300.0 or SM4500 Cl B	600	600
	Total Petroleum Hydrocarbons (TPH)	EPA SW-846 Method 8015M Ext	100	100
	Gas Range Organics + Diesel Range Organics (GRO + DRO)	EPA SW-846 Method 8015M	N/A	N/A
	Benzene	EPA SW-846 Methods 8021b or 8260b	10	10
	Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA SW-846 Methods 8021b or 8260b	50	50

* Measured in milligrams per kilogram (mg/kg)
† Table I, Section 19.15.29.12 of the New Mexico Administrative Code (NMAC).
‡ The NMOCD Reclamation Standard applies only to the top 4' of soil in non-production areas. Section 19.15.29.13 D.(1) NMAC.

4.0 REMEDIATION ACTIVITIES SUMMARY

On January 19, 2023, remediation activities commenced at the release site. In accordance with NMOCD regulatory guidelines, impacted soil affected above the NMOCD Closure Criteria and NMOCD Reclamation Standards was excavated and stockpiled on-site, pending transfer to an NMOCD-permitted surface waste facility for disposal. Olfactory/visual senses and/or a chloride test kit were utilized to field-screen the horizontal extent of impacted soil and to guide the excavation. The sidewalls and floors of the excavation were advanced until field tests and field observations suggested BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards. Representative five-point composite confirmation soil samples were collected every 200 square feet from the sidewalls and floor of the excavated area to be submitted for laboratory analysis.

On January 19, 2023, Etech collected 10 confirmation soil samples (NW1, NW2, EW1, EW2, SW1, WW1, FL 1 @ 2', FL 2 @ 2', FL 3 @ 2', and FL 4 @ 2') from the sidewalls and floor of the excavated area. The soil samples were submitted to a certified, commercial laboratory (henceforth, "the laboratory") for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory method detection limit (MDL). Chloride concentrations ranged from 64.0 mg/kg in soil samples NW2, EW2, SW1, and FL 1 @ 2' to 112 mg/kg in soil samples NW1 and WW1.

On January 20, 2023, Etech collected nine (9) confirmation soil samples (NW3, EW3, EW4, SW2, SW4, SW5, WW2, FL 5 @ 2', and FL 6 @ 2') from the sidewalls and floor of the excavated area. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory MDL. Chloride concentrations ranged from 16.0 mg/kg in soil sample WW2 to 80.0 mg/kg in soil sample SW5.

The final dimensions of the excavated area were approximately 80 to 120 feet in length, 10 to 44 feet in width, and two (2) feet in depth. During the course of remediation activities, Etech transported approximately 200 cubic yards of impacted soil to an NMOCD-permitted surface waste facility for disposal and imported approximately 200 cubic yards of locally sourced, non-impacted material to the site for use as backfill.

Soil sample locations and the extent of the excavated area are depicted in Figure 3, "Site & Sample Location Map". Soil chemistry data is summarized in Table 1. Field data and a soil profile log are provided in Appendix B. Laboratory analytical reports are provided in Appendix C. General photographs of the site are provided in Appendix D.

5.0 RESTORATION, RECLAMATION & RE-VEGETATION PLAN

The release was limited to the production pad of an active tank battery. Upon receiving laboratory analytical results from confirmation soil samples, excavated areas were backfilled with locally sourced, non-impacted, "like" material placed at or near original relative positions and compacted/contoured to meet the needs of the facility. Final reclamation and revegetation will be conducted upon decommissioning and abandonment of the tank battery.

6.0 SOIL CLOSURE REQUEST

Remediation activities were conducted in accordance with NMOCD regulatory guidelines. Impacted soil affected above the NMOCD Closure Criteria and NMOCD Reclamation Standards was excavated and transported to an NMOCD-permitted disposal facility. Laboratory analytical results from confirmation soil samples indicate in-situ concentrations of BTEX, TPH, and chloride are below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards.

Based on laboratory analytical results and field activities conducted to date, Etech recommends Mewbourne Oil Company provide copies of this *Remediation Summary & Soil Closure Request* to the appropriate agencies and request closure be granted to the Viper 32-29 release site.

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *Remediation Summary & Soil Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Mewbourne Oil Company. Use of the information contained in this report is prohibited without the consent of Etech and/or Mewbourne Oil Company.

8.0 DISTRIBUTION

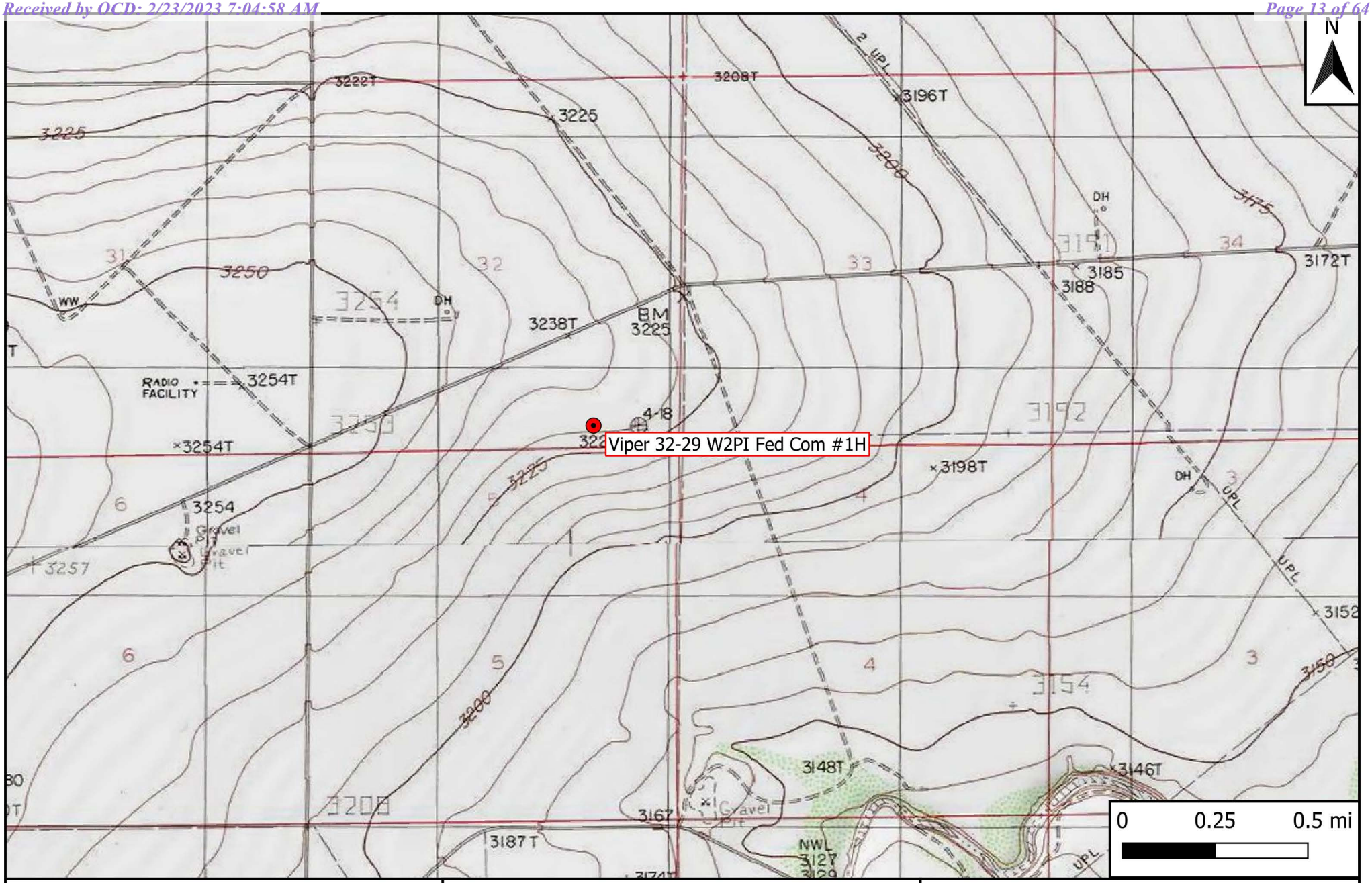
Mewbourne Oil Company
4801 Business Park Blvd.
Hobbs, NM 88240

New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 2
811 S. First Street
Artesia, NM 88210

Hobbs Field Office
New Mexico State Land Office
2827 North Dal Paso Street
Suite 117
Hobbs, NM 88240

(Electronic Submission)

Figure 1
Topographic Map



Legend

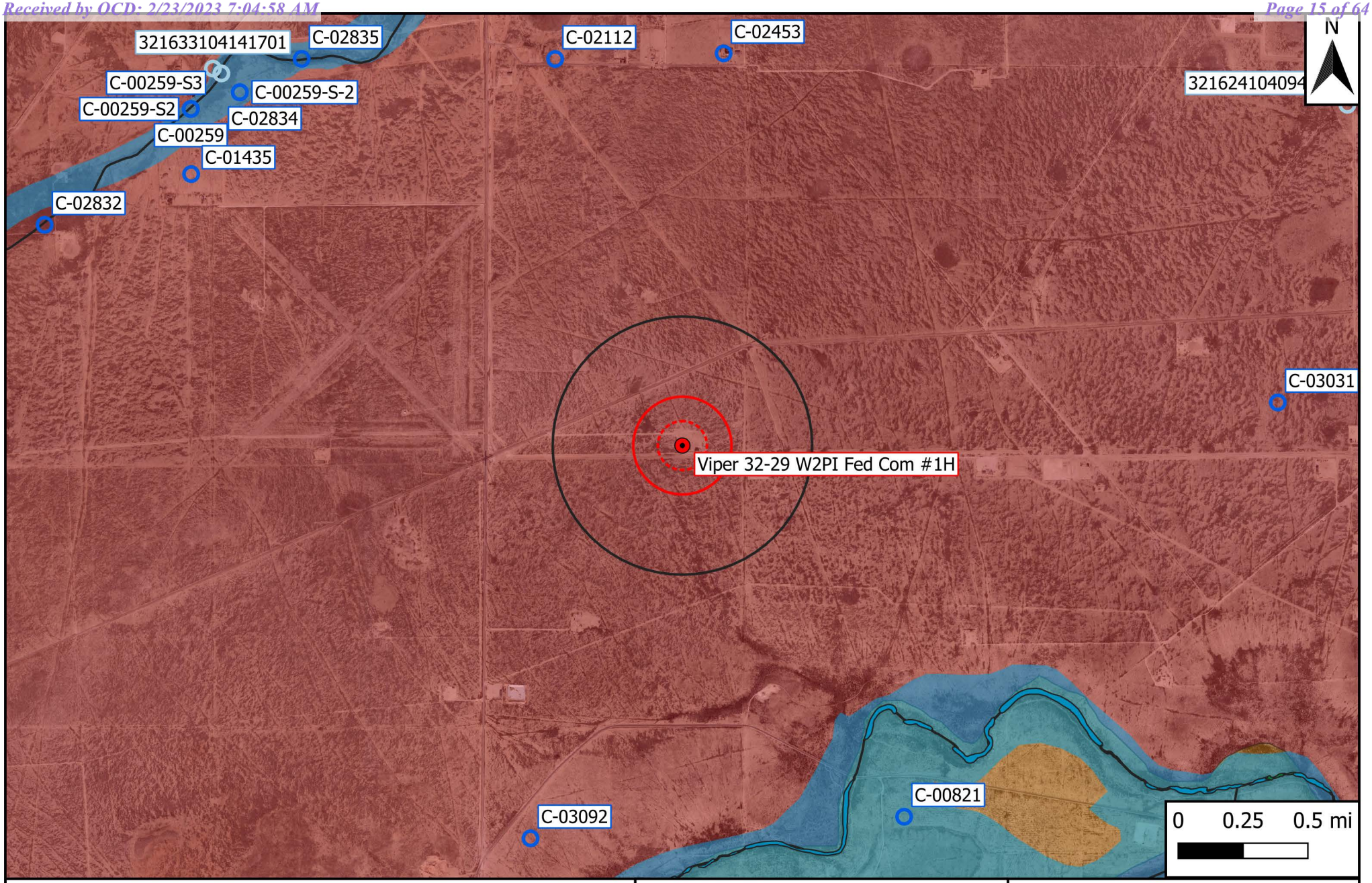
- Site Location

Figure 1
Topographic Map
Mewbourne Oil Company
Viper 32-29 W2PI Fed Com #1H
GPS: 32.254656, -104.207808
Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: lc Date: 1/23/23

Figure 2
Site Characterization Map



Legend

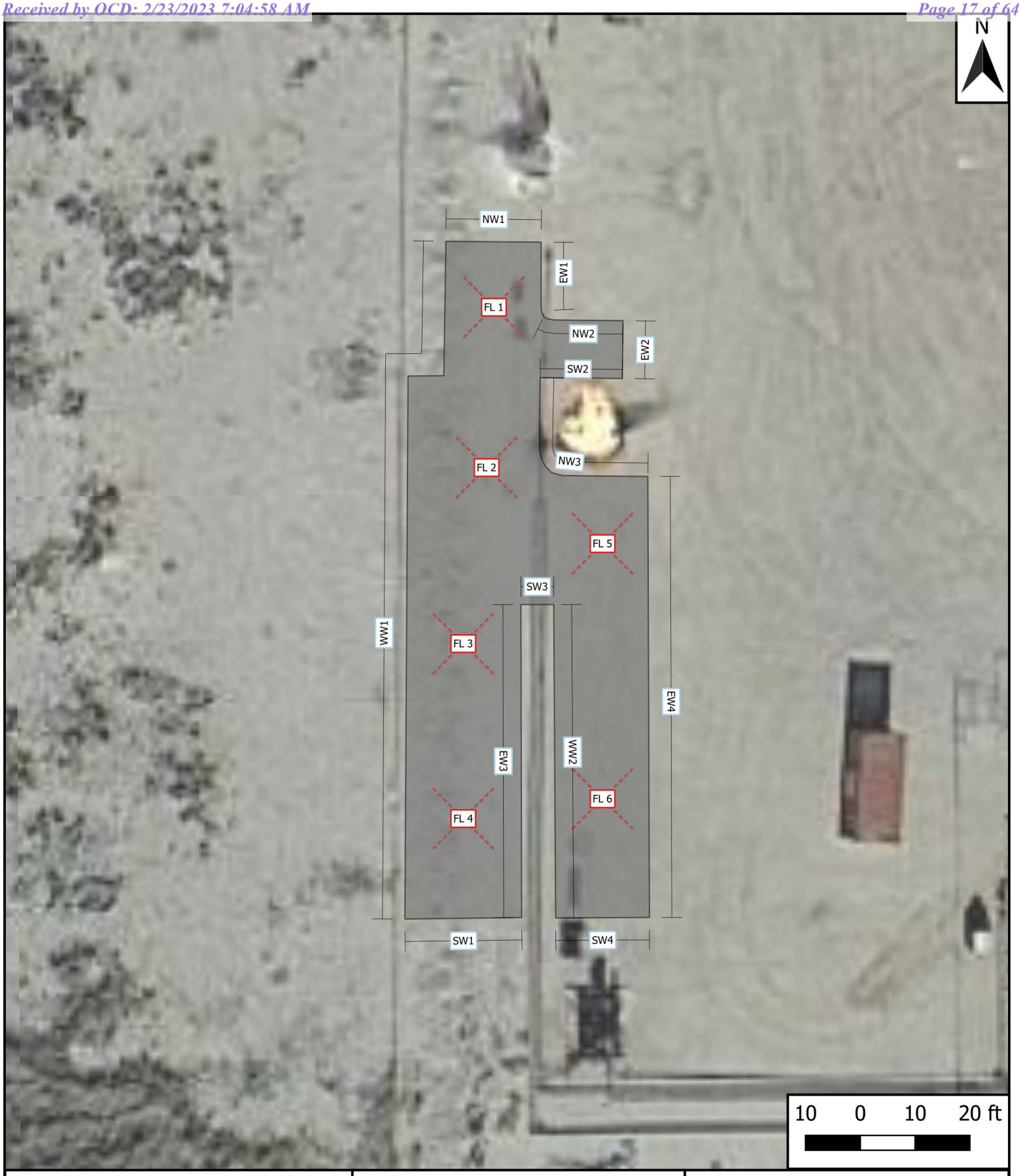
- Site Location
- Well - NMOSE
- Well - USGS
- Well - Exploratory/Monitor
- Potash Mine Workings
- 100-Year Flood Zone
- Emergent/Forested Wetlands
- Freshwater Pond/Lake
- Karst Potential (Low/Med./High)
- Riverine
- 500-Ft Radius
- 1,000-Ft Radius
- 0.5-Mi Radius
- Municipal Boundary

Figure 2
Site Characterization Map
Mewbourne Oil Company
Viper 32-29 W2PI Fed Com #1H
GPS: 32.254656, -104.207808
Eddy County

ETECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: lc Date: 1/23/23

Figure 3
Site & Sample Location Map



Legend

- Excavation Extent
- Composite Floor Sample
- Composite Wall Sample

Figure 3

Site & Sample Location Map
Mewbourne Oil Company
Viper 32-29 W2PI Fed Com #1H
GPS: 32.254656, -104.207808
Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: lc Date: 2/17/23

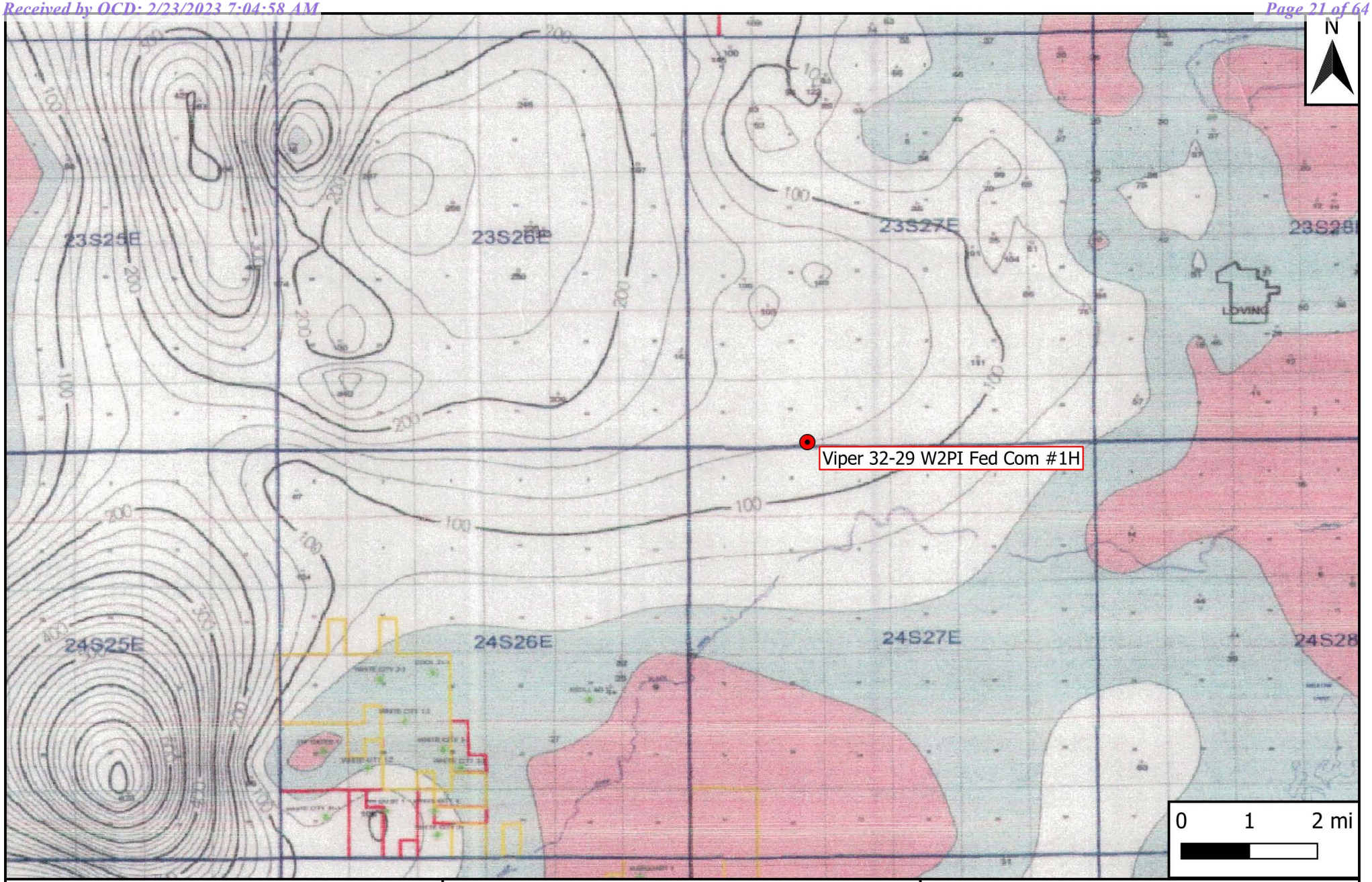
Table 1
Concentrations of BTEX, TPH & Chloride in Soil

Table 1
Concentrations of BTEX, TPH & Chloride in Soil
Mewbourne Oil Company
Viper 32-29 W2PI Fed Com #1H
NMOCD Ref. #: nAPP2302744797

NMOCD Closure Criteria				**10**	**50**	**N/A**	**N/A**	**N/A**	**N/A**	**100**	**600**
NMOCD Reclamation Standard				**10**	**50**	**N/A**	**N/A**	**N/A**	**N/A**	**100**	**600**
				SW 846 8021B		**SW 846 8015M Ext.**					**4500 Cl**
Sample ID	**Date**	**Depth (Feet)**	**Soil Status**	**Benzene (mg/kg)**	**BTEX (mg/kg)**	**GRO C_6-C_{10} (mg/kg)**	**DRO C_{10}-C_{28} (mg/kg)**	**GRO + DRO C_6-C_{28} (mg/kg)**	**ORO C_{28}-C_{36} (mg/kg)**	**TPH C_6-C_{36} (mg/kg)**	**Chloride (mg/kg)**
NW1	1/19/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	112
NW2	1/19/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
NW3	1/20/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
EW1	1/19/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0
EW2	1/19/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
EW3	1/20/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
EW4	1/20/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
SW1	1/19/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
SW2	1/20/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
SW3	1/20/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
SW4	1/20/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0
WW1	1/19/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	112
WW2	1/20/2023	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
FL 1 @ 2'	1/19/2023	2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
FL 2 @ 2'	1/19/2023	2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0
FL 3 @ 2'	1/19/2023	2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0
FL 4 @ 2'	1/19/2023	2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0
FL 5 @ 2'	1/20/2023	2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
FL 6 @ 2'	1/20/2023	2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0

Dash (-): Sample not analyzed for that constituent.
Bold: NMOCD Closure Criteria exceedance.
Red: NMOCD Reclamation Standard exceedance.

Appendix A
Depth to Groundwater Information



Legend

- Site Location

Figure 4

Inferred Depth to Groundwater Trend Map

Mewbourne Oil Company

Viper 32-29 W2PI Fed Com #1H

GPS: 32.254656, -104.207808

Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: lc Date: 1/23/23

New Mexico Office of the State Engineer

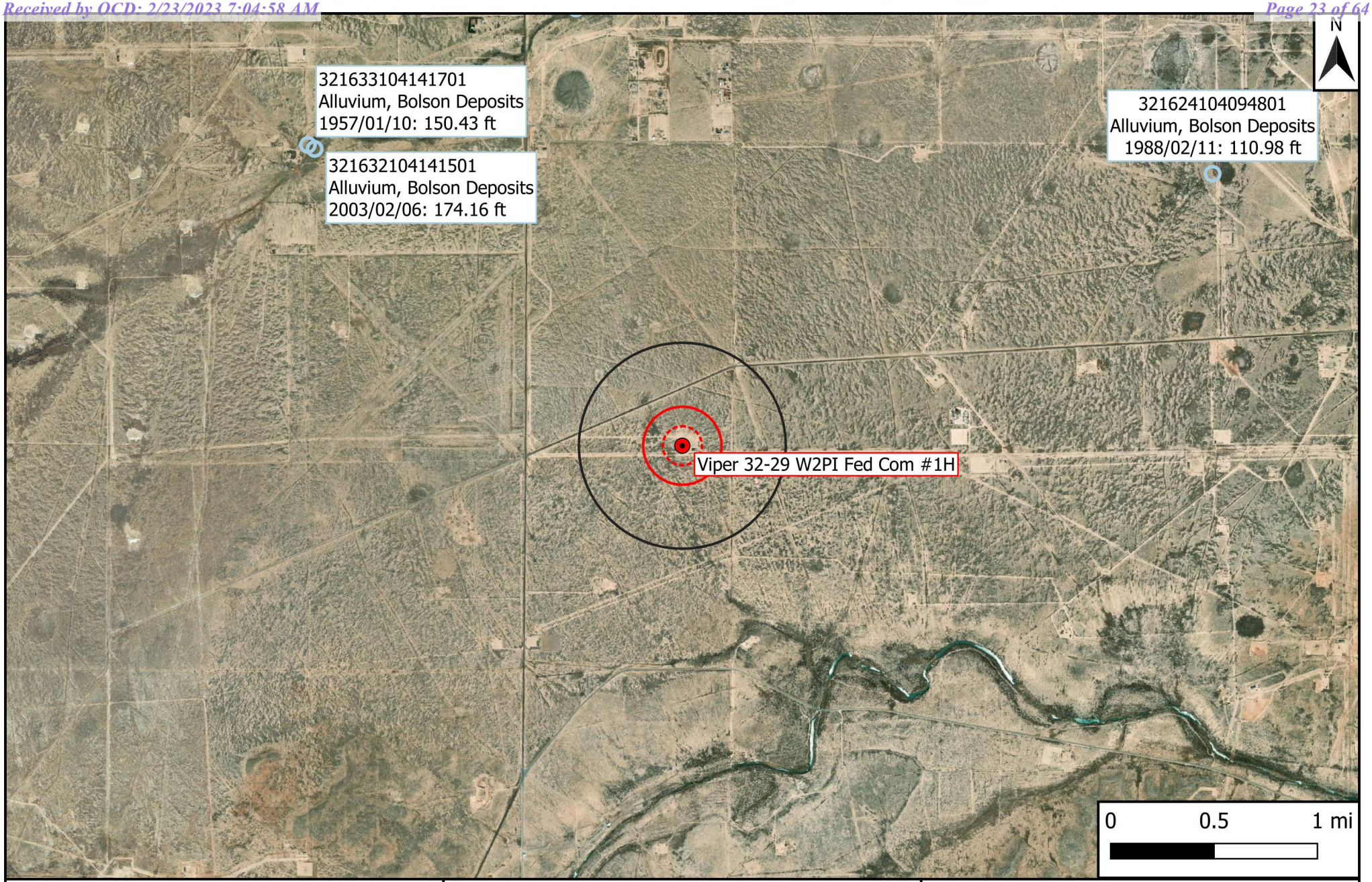
Water Column/Average Depth to Water

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

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 574620.11 **Northing (Y):** 3568931.73 **Radius:** 804.67



Legend
- Site Location
- Well - USGS
- 500-Ft Radius
- 1,000-Ft Radius
- 0.5-Mi Radius

Figure 5
USGS Well Proximity Map
Mewbourne Oil Company
Viper 32-29 W2PI Fed Com #1H
GPS: 32.254656, -104.207808
Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: lc Date: 1/23/23

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click forNews Bulletins

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 321624104094801

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

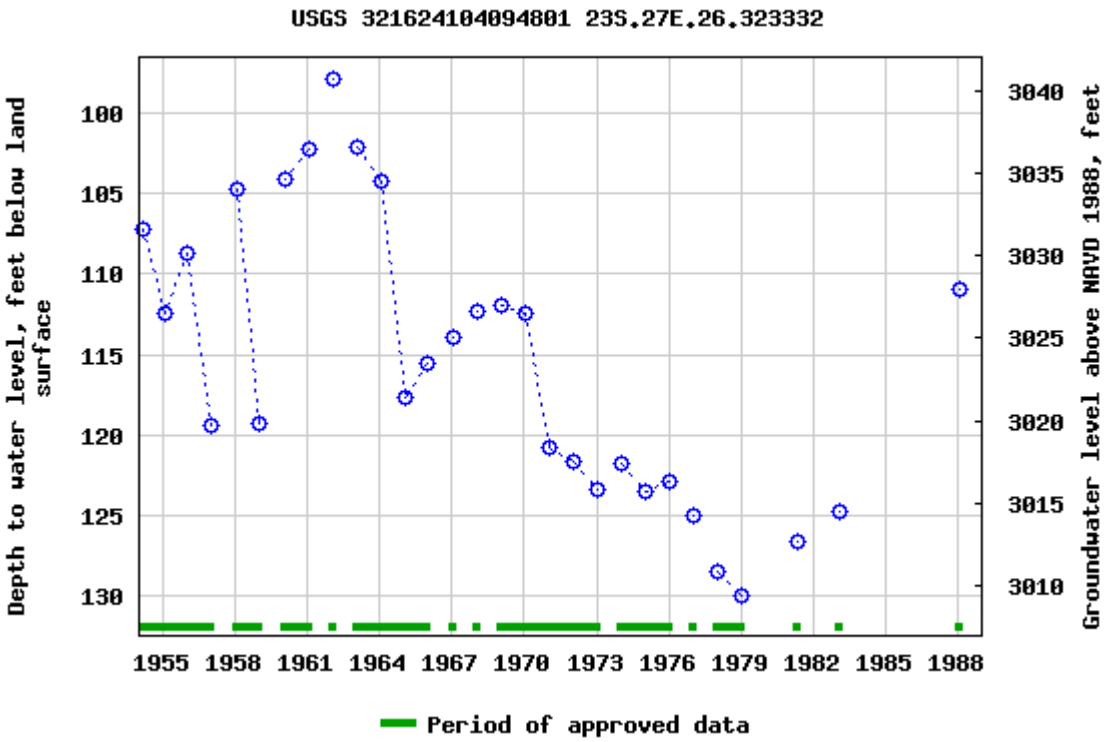
USGS 321624104094801 23S.27E.26.323332

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°16'24", Longitude 104°09'48" NAD27
Land-surface elevation 3,139 feet above NAVD88
The depth of the well is 156 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-01-16 16:12:09 EST
0.6 0.5 nadww02

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 321632104141501

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

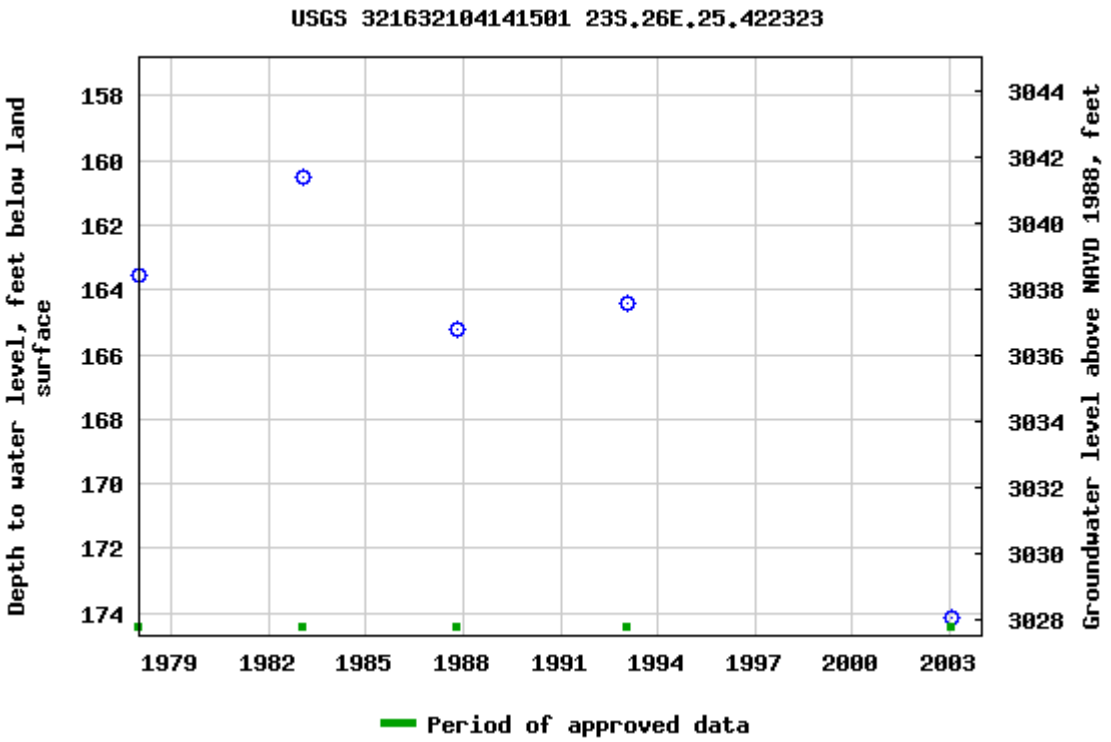
USGS 321632104141501 23S.26E.25.422323

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°16'32", Longitude 104°14'15" NAD27
Land-surface elevation 3,202 feet above NAVD88
The depth of the well is 204 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-01-16 16:12:10 EST
0.64 0.55 nadww02

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 321633104141701

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

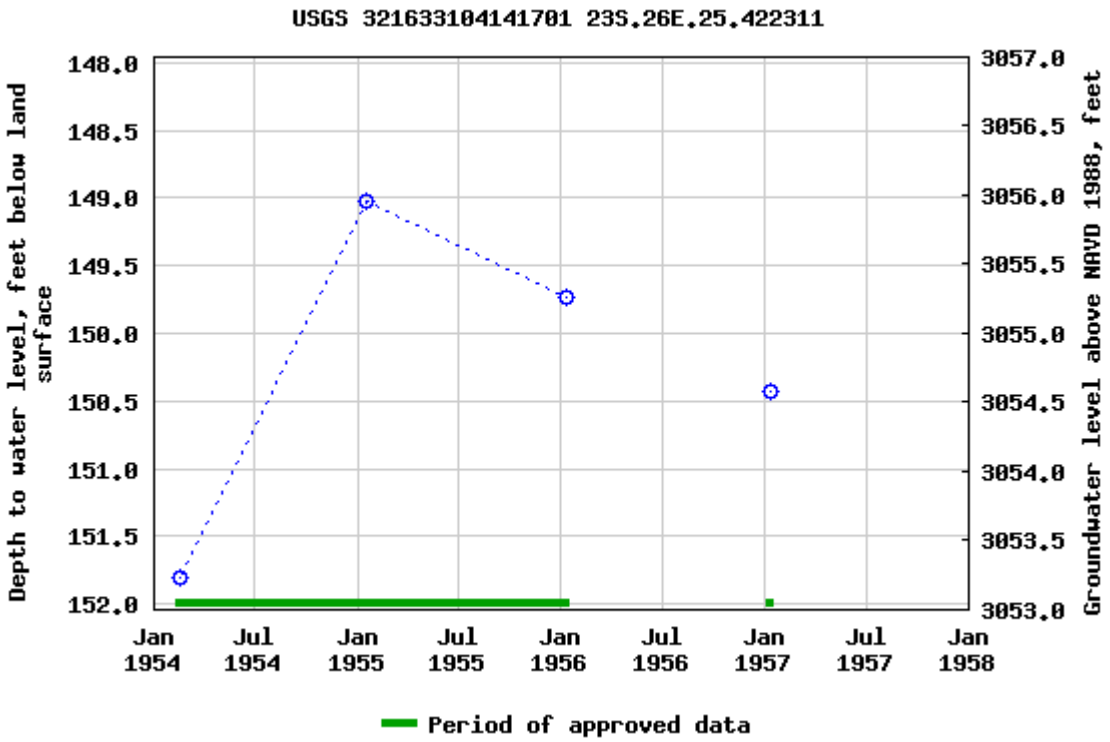
USGS 321633104141701 23S.26E.25.422311

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°16'33", Longitude 104°14'17" NAD27
Land-surface elevation 3,205 feet above NAVD88
The depth of the well is 180 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-01-16 16:12:11 EST
0.55 0.49 nadww02

Appendix B
Field Data & Soil Profile Logs

eTECH Environmental & Safety Solutions, Inc.

Sample Log

Date: 11/19/23

Project: Viper 32-29 W2PI Fed Com 1H

Project Number: 17408 Latitude: 32.254597 Longitude: -104.20781

Sample ID	PID/Odor	Chloride Conc.	GPS
NW1	None	2.6 300	
FL1@2'	None	2.0 200	
FL2@2'	None	2.2 232	
FL3@2'	None	1.6 148	
NW1	None	1.8 196	
NW2	None	2.0 200	
EW1	None	1.8 146	
EW2	None	2.6 300	
SW1	None	2.0 206	
FL4@2'	None	1.8 146	
FL5@2'	None	1.8 146	
FL6@2'	None	2.2 232	
NW3	None	2.0 200	
EW3	None	2.0 200	
EW4	None	1.8 146	
SW3	None	1.6 148	
SW4	None	2.0 200	
SW5	None	2.0 200	
WW2	None	1.0 146	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

eTECH Environmental & Safety Solutions, Inc.

Soil Profile

Date:

Project: Viper 32-29 W2PI Fed Com 1H

Project Number: 17408 Latitude: 32.254597 Longitude: -104.20781

Depth (ft. bgs)	Description
1	Caliche
2	Caliche - topsoil
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
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14	
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Appendix C
Laboratory Analytical Reports

CARDINAL Laboratories

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

January 23, 2023

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: VIPER 32 - 29 W2PI FED COM 1H

Enclosed are the results of analyses for samples received by the laboratory on 01/19/23 15:10.

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

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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: NW 1 (H230287-01)

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	01/21/2023	ND	2.19	110	2.00	1.88	
Toluene*	<0.050	0.050	01/21/2023	ND	2.23	112	2.00	2.48	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.18	109	2.00	3.64	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.72	112	6.00	3.75	
Total BTEX	<0.300	0.300	01/21/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

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

Surrogate: 1-Chlorooctadecane *113 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: FL 1 @ 2' (H230287-02)

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	01/21/2023	ND	2.19	110	2.00	1.88	
Toluene*	<0.050	0.050	01/21/2023	ND	2.23	112	2.00	2.48	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.18	109	2.00	3.64	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.72	112	6.00	3.75	
Total BTEX	<0.300	0.300	01/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *119 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

Surrogate: 1-Chlorooctane *90.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *97.4 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: FL 2 @ 2' (H230287-03)

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	01/21/2023	ND	2.19	110	2.00	1.88	
Toluene*	<0.050	0.050	01/21/2023	ND	2.23	112	2.00	2.48	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.18	109	2.00	3.64	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.72	112	6.00	3.75	
Total BTEX	<0.300	0.300	01/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

Surrogate: 1-Chlorooctane *79.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.1 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: FL 3 @ 2' (H230287-04)

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	01/21/2023	ND	2.15	108	2.00	1.49	
Toluene*	<0.050	0.050	01/21/2023	ND	2.21	111	2.00	1.92	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.14	107	2.00	1.63	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.58	110	6.00	1.95	
Total BTEX	<0.300	0.300	01/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

Surrogate: 1-Chlorooctane *91.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *99.1 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: WW 1 (H230287-05)

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	01/21/2023	ND	2.15	108	2.00	1.49	
Toluene*	<0.050	0.050	01/21/2023	ND	2.21	111	2.00	1.92	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.14	107	2.00	1.63	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.58	110	6.00	1.95	
Total BTEX	<0.300	0.300	01/21/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

Surrogate: 1-Chlorooctane *78.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.0 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: EW 1 (H230287-06)

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	01/21/2023	ND	2.15	108	2.00	1.49	
Toluene*	<0.050	0.050	01/21/2023	ND	2.21	111	2.00	1.92	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.14	107	2.00	1.63	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.58	110	6.00	1.95	
Total BTEX	<0.300	0.300	01/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

Surrogate: 1-Chlorooctane *90.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *98.1 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: EW 2 (H230287-07)

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	01/21/2023	ND	2.15	108	2.00	1.49	
Toluene*	<0.050	0.050	01/21/2023	ND	2.21	111	2.00	1.92	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.14	107	2.00	1.63	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.58	110	6.00	1.95	
Total BTEX	<0.300	0.300	01/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

Surrogate: 1-Chlorooctane *93.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *100 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: SW 1 (H230287-08)

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	01/21/2023	ND	2.15	108	2.00	1.49	
Toluene*	<0.050	0.050	01/21/2023	ND	2.21	111	2.00	1.92	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.14	107	2.00	1.63	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.58	110	6.00	1.95	
Total BTEX	<0.300	0.300	01/21/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

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

Surrogate: 1-Chlorooctadecane *111 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: NW 2 (H230287-09)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2023	ND	2.15	108	2.00	1.49	
Toluene*	<0.050	0.050	01/21/2023	ND	2.21	111	2.00	1.92	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.14	107	2.00	1.63	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.58	110	6.00	1.95	
Total BTEX	<0.300	0.300	01/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

Surrogate: 1-Chlorooctane *83.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *101 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/19/2023	Sampling Date:	01/19/2023
Reported:	01/23/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: FL 4 @ 2' (H230287-10)

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	01/21/2023	ND	2.15	108	2.00	1.49	
Toluene*	<0.050	0.050	01/21/2023	ND	2.21	111	2.00	1.92	
Ethylbenzene*	<0.050	0.050	01/21/2023	ND	2.14	107	2.00	1.63	
Total Xylenes*	<0.150	0.150	01/21/2023	ND	6.58	110	6.00	1.95	
Total BTEX	<0.300	0.300	01/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	01/20/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/20/2023	ND	243	121	200	3.04	
DRO >C10-C28*	<10.0	10.0	01/20/2023	ND	227	113	200	5.20	
EXT DRO >C28-C36	<10.0	10.0	01/20/2023	ND					

Surrogate: 1-Chlorooctane *88.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *97.9 %* *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

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

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:	Etech Environmental & Safety Solutions, Inc.	**BILL TO**	
Project Manager:	Joel Lowry	P.O. #:	
Address:	2617 W Marland	Company	Newbourne
City:	Hobbs	State: NM Zip: 88240	Attn:
Phone #:	(575) 264-9884	Fax #:	Address:
Project #:	17403	Project Owner: Newbourne	City:
Project Name:	Viper 32-29 w/PE Fed com 1H		State: Zip:
Project Location:	Rural Eddy Co., NM		Phone #:
Sampler Name:	Miguel Ramirez		Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chloride	TPH (8015M)	BTEX (8021B)
H230287																	
1	NW1	C	1			X					X		1/19/23	9:30	X	X	X
2	FL1 @ 2'	C	1			X					X		1/19/23	9:40	X	X	X
3	FL2 @ 2'	C	1			X					X		1/19/23	9:45	X	X	X
4	FL3 @ 2'	C	1			X					X		1/19/23	11:20	X	X	X
5	NW1	C	1			X					X		1/19/23	11:30	X	X	X
6	EW1	C	1			X					X		1/19/23	12:00	X	X	X
7	EW2	C	1			X					X		1/19/23	12:10	X	X	X
8	SW1	C	1			X					X		1/19/23	12:20	X	X	X
9	NW2	C	1			X					X		1/19/23	12:30	X	X	X
10	FL4@2'	C	1			X					X		1/19/23	12:40	X	X	X

Relinquished By:	Date: 1-19-23	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1510		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		Please email results and copy of CoC to pm@etechenv.com.

Delivered By: (Circle One) Sampler - UPS - Bus - Other: #113 5.0c / 4.4c

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) JO

FORM-006
Revision 1.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

CARDINAL Laboratories

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

January 25, 2023

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: VIPER 32 - 29 W2PI FED COM 1H

Enclosed are the results of analyses for samples received by the laboratory on 01/20/23 15:50.

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

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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/20/2023	Sampling Date:	01/20/2023
Reported:	01/25/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: FL 5 @ 2' (H230314-01)

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	01/24/2023	ND	1.87	93.6	2.00	14.0	
Toluene*	<0.050	0.050	01/24/2023	ND	1.94	96.9	2.00	14.7	
Ethylbenzene*	<0.050	0.050	01/24/2023	ND	1.88	94.2	2.00	14.3	
Total Xylenes*	<0.150	0.150	01/24/2023	ND	5.83	97.1	6.00	14.2	
Total BTEX	<0.300	0.300	01/24/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	01/23/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2023	ND	225	113	200	1.46	
DRO >C10-C28*	<10.0	10.0	01/23/2023	ND	216	108	200	3.19	
EXT DRO >C28-C36	<10.0	10.0	01/23/2023	ND					

Surrogate: 1-Chlorooctane *81.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.0 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/20/2023	Sampling Date:	01/20/2023
Reported:	01/25/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: FL 6 @ 2' (H230314-02)

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	01/24/2023	ND	1.87	93.6	2.00	14.0	
Toluene*	<0.050	0.050	01/24/2023	ND	1.94	96.9	2.00	14.7	
Ethylbenzene*	<0.050	0.050	01/24/2023	ND	1.88	94.2	2.00	14.3	
Total Xylenes*	<0.150	0.150	01/24/2023	ND	5.83	97.1	6.00	14.2	
Total BTEX	<0.300	0.300	01/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *119 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	01/23/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2023	ND	225	113	200	1.46	
DRO >C10-C28*	<10.0	10.0	01/23/2023	ND	216	108	200	3.19	
EXT DRO >C28-C36	<10.0	10.0	01/23/2023	ND					

Surrogate: 1-Chlorooctane *86.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.5 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/20/2023	Sampling Date:	01/20/2023
Reported:	01/25/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: NW 3 (H230314-03)

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	01/24/2023	ND	1.87	93.6	2.00	14.0	
Toluene*	<0.050	0.050	01/24/2023	ND	1.94	96.9	2.00	14.7	
Ethylbenzene*	<0.050	0.050	01/24/2023	ND	1.88	94.2	2.00	14.3	
Total Xylenes*	<0.150	0.150	01/24/2023	ND	5.83	97.1	6.00	14.2	
Total BTEX	<0.300	0.300	01/24/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	01/23/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2023	ND	225	113	200	1.46	
DRO >C10-C28*	<10.0	10.0	01/23/2023	ND	216	108	200	3.19	
EXT DRO >C28-C36	<10.0	10.0	01/23/2023	ND					

Surrogate: 1-Chlorooctane *77.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.3 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/20/2023	Sampling Date:	01/20/2023
Reported:	01/25/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: EW 3 (H230314-04)

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	01/24/2023	ND	1.87	93.6	2.00	14.0	
Toluene*	<0.050	0.050	01/24/2023	ND	1.94	96.9	2.00	14.7	
Ethylbenzene*	<0.050	0.050	01/24/2023	ND	1.88	94.2	2.00	14.3	
Total Xylenes*	<0.150	0.150	01/24/2023	ND	5.83	97.1	6.00	14.2	
Total BTEX	<0.300	0.300	01/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	01/23/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2023	ND	225	113	200	1.46	
DRO >C10-C28*	<10.0	10.0	01/23/2023	ND	216	108	200	3.19	
EXT DRO >C28-C36	<10.0	10.0	01/23/2023	ND					

Surrogate: 1-Chlorooctane *73.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *76.9 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/20/2023	Sampling Date:	01/20/2023
Reported:	01/25/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: EW 4 (H230314-05)

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	01/24/2023	ND	1.87	93.6	2.00	14.0	
Toluene*	<0.050	0.050	01/24/2023	ND	1.94	96.9	2.00	14.7	
Ethylbenzene*	<0.050	0.050	01/24/2023	ND	1.88	94.2	2.00	14.3	
Total Xylenes*	<0.150	0.150	01/24/2023	ND	5.83	97.1	6.00	14.2	
Total BTEX	<0.300	0.300	01/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *115 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	01/23/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2023	ND	225	113	200	1.46	
DRO >C10-C28*	<10.0	10.0	01/23/2023	ND	216	108	200	3.19	
EXT DRO >C28-C36	<10.0	10.0	01/23/2023	ND					

Surrogate: 1-Chlorooctane *83.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.2 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/20/2023	Sampling Date:	01/20/2023
Reported:	01/25/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: SW 3 (H230314-06)

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	01/24/2023	ND	1.87	93.6	2.00	14.0	
Toluene*	<0.050	0.050	01/24/2023	ND	1.94	96.9	2.00	14.7	
Ethylbenzene*	<0.050	0.050	01/24/2023	ND	1.88	94.2	2.00	14.3	
Total Xylenes*	<0.150	0.150	01/24/2023	ND	5.83	97.1	6.00	14.2	
Total BTEX	<0.300	0.300	01/24/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	01/23/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2023	ND	225	113	200	1.46	
DRO >C10-C28*	<10.0	10.0	01/23/2023	ND	216	108	200	3.19	
EXT DRO >C28-C36	<10.0	10.0	01/23/2023	ND					

Surrogate: 1-Chlorooctane *66.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *69.8 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/20/2023	Sampling Date:	01/20/2023
Reported:	01/25/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: SW 4 (H230314-07)

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	01/24/2023	ND	1.87	93.6	2.00	14.0	
Toluene*	<0.050	0.050	01/24/2023	ND	1.94	96.9	2.00	14.7	
Ethylbenzene*	<0.050	0.050	01/24/2023	ND	1.88	94.2	2.00	14.3	
Total Xylenes*	<0.150	0.150	01/24/2023	ND	5.83	97.1	6.00	14.2	
Total BTEX	<0.300	0.300	01/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	01/23/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2023	ND	225	113	200	1.46	
DRO >C10-C28*	<10.0	10.0	01/23/2023	ND	216	108	200	3.19	
EXT DRO >C28-C36	<10.0	10.0	01/23/2023	ND					

Surrogate: 1-Chlorooctane *74.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *79.5 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/20/2023	Sampling Date:	01/20/2023
Reported:	01/25/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: SW 5 (H230314-08)

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	01/24/2023	ND	1.87	93.6	2.00	14.0	
Toluene*	<0.050	0.050	01/24/2023	ND	1.94	96.9	2.00	14.7	
Ethylbenzene*	<0.050	0.050	01/24/2023	ND	1.88	94.2	2.00	14.3	
Total Xylenes*	<0.150	0.150	01/24/2023	ND	5.83	97.1	6.00	14.2	
Total BTEX	<0.300	0.300	01/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *114 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	01/23/2023	ND	400	100	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2023	ND	225	113	200	1.46	
DRO >C10-C28*	<10.0	10.0	01/23/2023	ND	216	108	200	3.19	
EXT DRO >C28-C36	<10.0	10.0	01/23/2023	ND					

Surrogate: 1-Chlorooctane *66.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *69.4 %* *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:

Etech Environmental & Safety Solutions
JOEL LOWRY
2617 W MARLAND
HOBBS NM, 88240
Fax To:

Received:	01/20/2023	Sampling Date:	01/20/2023
Reported:	01/25/2023	Sampling Type:	Soil
Project Name:	VIPER 32 - 29 W2PI FED COM 1H	Sampling Condition:	Cool & Intact
Project Number:	17408	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - EDDY CO., NM		

Sample ID: WW 2 (H230314-09)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/24/2023	ND	1.87	93.6	2.00	14.0	
Toluene*	<0.050	0.050	01/24/2023	ND	1.94	96.9	2.00	14.7	
Ethylbenzene*	<0.050	0.050	01/24/2023	ND	1.88	94.2	2.00	14.3	
Total Xylenes*	<0.150	0.150	01/24/2023	ND	5.83	97.1	6.00	14.2	
Total BTEX	<0.300	0.300	01/24/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	01/23/2023	ND	400	100	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2023	ND	225	113	200	1.46	
DRO >C10-C28*	<10.0	10.0	01/23/2023	ND	216	108	200	3.19	
EXT DRO >C28-C36	<10.0	10.0	01/23/2023	ND					

Surrogate: 1-Chlorooctane *77.9 %* *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

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:	Etech Environmental & Safety Solutions, Inc.	BILL TO	
Project Manager:	Joel Lowry	P.O. #:	
Address:	2617 W Marland	Company	Newbourne
City:	Hobbs	State: NM Zip: 88240	Attn:
Phone #:	(575) 264-9884	Fax #:	Address:
Project #:	17408	Project Owner: Newbourne	City:
Project Name:	Viper 32.29 W2PI Fed com 1H		State: Zip:
Project Location:	Rural Eddy co., nm		Phone #:
Sampler Name:	Miguel Ramirez		Fax #:

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST												
	Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chloride	TPH (8015M)	BTEX (8021B)											
	H230314																												
1		FL5@2'	C	1			X					X		1/20/23	09:00	X	X	X											
2		FL6@2'	C	1			X					X		1/20/23	09:10	X	X	X											
3		SW3	C	1			X					X		1/20/23	09:20	X	X	X											
4		EW3	C	1			X					X		1/20/23	09:30	X	X	X											
5		EW4	C	1			X					X		1/20/23	09:40	X	X	X											
6		SW3	C	1			X					X		1/20/23	09:50	X	X	X											
7		SW4	C	1			X					X		1/20/23	10:00	X	X	X											
8		SW5	C	1			X					X		1/20/23	10:10	X	X	X											
9		WW2	C	1			X					X		1/20/23	10:20	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 consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 1-20-23	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1650		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		Please email results and copy of CoC to pm@etechenv.com.

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 4.6°C / 4.0°C #113

Sample Condition: Cool ☑ Yes ☐ No / Intact ☑ Yes ☐ No

CHECKED BY: (Initials)

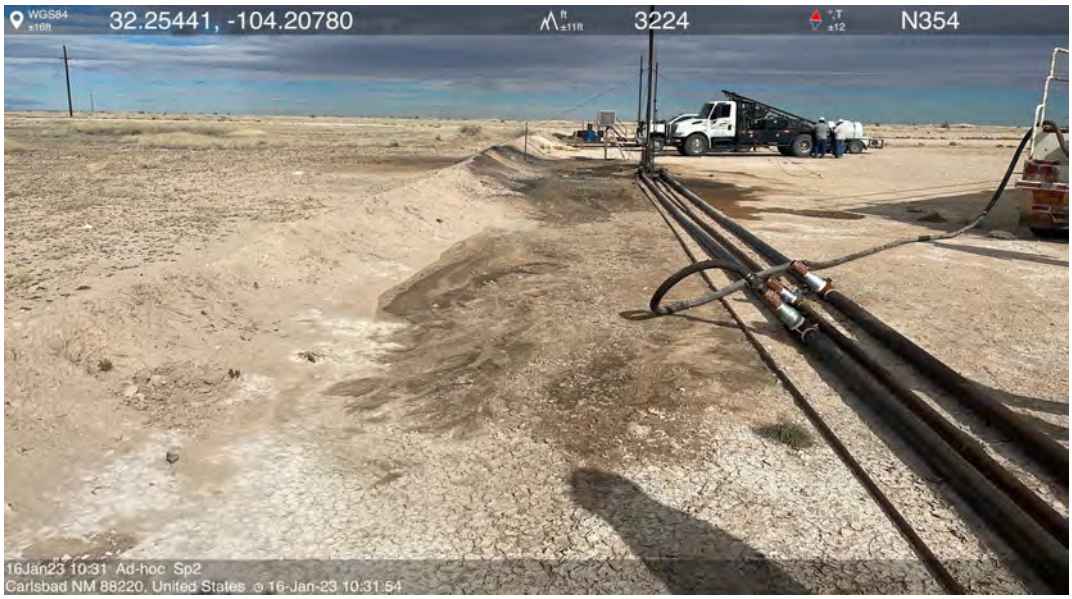
† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

FORM-006
Revision 1.0

Appendix D
Photographic Log

Photographic Log

Photo Number: 1	
Photo Direction: South	
Photo Description: View of the affected area.	

Photo Number: 2	
Photo Direction: North	
Photo Description: View of the affected area.	

Photographic Log

Photo Number: 3	
Photo Direction: North-Northwest	
Photo Description: View of the excavated area.	

Photo Number: 4	
Photo Direction: North-Northwest	
Photo Description: View of the excavated area.	

Photographic Log

Photo Number: 5	
Photo Direction: East-Northeast	
Photo Description: View of the excavated area.	

Photo Number: 6	
Photo Direction: South-Southeast	
Photo Description: View of the excavated area.	

Photographic Log

Photo Number: 7	
Photo Direction: Southwest	
Photo Description: View of the remediated area after backfill and regrading.	

Photo Number: 8	
Photo Direction: West	
Photo Description: View of the remediated area after backfill and regrading.	

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 189624

CONDITIONS

Operator: MEWBOURNE OIL CO P.O. Box 5270 Hobbs, NM 88241	OGRID: 14744
	Action Number: 189624
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2302744797 VIPER 32-29 W2PI FED COM #1H, thank you. This closure is approved.	6/23/2023