

Incident ID	nAPP2225627853
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>~130</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	nAPP2225627853
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: Meredith O'Brien Title: Sr. Environmental Engineer

Signature: Meredith O'Brien Date: 2/14/2023

email: mobrien@legacyreserves.com Telephone: (720) 327-1543

OCD Only

Received by: Jocelyn Harimon Date: 02/16/2023

Incident ID	nAPP2225627853
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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: Meredith O'Brien Title: Sr. Environmental Engineer
Signature: Meredith O'Brien Date: 2/14/2023
email: mobrien@legacyreserves.com Telephone: (720) 327-1543

OCD Only

Received by: Jocelyn Harimon Date: 02/16/2023

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

Signature: Jennifer Nobui Date: 02/28/2023

Site Assessment Summary & Deferral Request

Legacy Reserves Operating, LP Cooper Jal Unit #128

Lea County, New Mexico
Unit Letter G, Section 24, Township 24 South, Range 36 East
Latitude 32.205361 North, Longitude 103.213569 West
NMOCD Reference No. nAPP2225627853

Prepared By:

Etech Environmental & Safety Solutions, Inc.
2617 W. Marland
Hobbs, New Mexico 88240



Zach Conder



Midland • San Antonio • Lubbock • Hobbs • Lafayette

TABLE OF CONTENTS

	Section
PROJECT INFORMATION.....	1.0
SITE CHARACTERIZATION.....	2.0
CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE.....	3.0
SITE ASSESSMENT SUMMARY.....	4.0
RESTORATION, RECLAMATION, AND RE-VEGETATION PLAN.....	5.0
DEFERRAL REQUEST.....	6.0
LIMITATIONS.....	7.0
DISTRIBUTION.....	8.0

FIGURES

- Figure 1 - Topographic Map
- Figure 2 - Aerial Proximity Map
- Figure 3 - Site and Sample Location Map

TABLES

- Table 1 - Concentrations of BTEX, TPH, and Chloride in Soil

APPENDICES

- Appendix A - Depth to Groundwater Information
- Appendix B - Field Data and Soil Profile Logs
- Appendix C - Laboratory Analytical Reports
- Appendix D - Photographic Log

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Legacy Reserves Operating, LP, has prepared this *Site Assessment Summary & Deferral Request* for the release site known as the Cooper Jal Unit #128 (henceforth, "Site"). Details of the release are summarized below:

Location of Release Source

Latitude: 32.205361 Longitude: -103.213569

Provided GPS are in WGS84 format.

Site Name:	Cooper Jal Unit #128	Site Type:	Tank Battery
Date Release Discovered:	9/10/2022	API # (if applicable):	30-025-11151

Unit Letter	Section	Township	Range	County
G	24	24S	36E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name R R R Land & Cattle Company)

Nature and Volume of Release

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 7 bbls	Volume Recovered (bbls) 7 bbls
	Is the concentration of total dissolved solids (TDS) in the produced water > 10,000 mg/L?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:

Flowline leak inside of firewall at battery.

Initial Response

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

Previously submitted portions of the NMOCD Form C-141 are available on 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 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?	~130 Feet		
Did the 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 any 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 the incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Did the release impact areas not on an exploration, development, production or storage site?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on 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 Standard for the Site are as follows:

Probable Depth to Groundwater	Constituent	Laboratory Analytical Method	Closure Criteria*†	Reclamation Standard*‡
~130 Feet	Chloride (Cl-)	EPA 300.0 or SM4500 Cl B	20,000	600
	Total Petroleum Hydrocarbons (TPH)	EPA SW-846 Method 8015M Ext	2,500	100
	Gas Range Organics + Diesel Range Organics (GRO + DRO)	EPA SW-846 Method 8015M	1,000	-
	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 SITE ASSESSMENT SUMMARY

Between November 30 and December 1, 2022, Etech conducted an initial site assessment. During the initial site assessment, six (6) hand-augered soil bores (V 1, V 2, V 3, V 4, V 5, and V 6) were advanced within the release margins in an effort to determine the vertical extent of soil impacts. A resistance layer was met at five (5) feet below ground surface (bgs) at soil bore location V 2, making In the course of advancing the hand-augered soil bores, thirteen (13) delineation soil samples (V 1 @ 0', V 1 @ 1', V 2 @ 2', V 2 @ 5' - R, V 3 @ 0', V 3 @ 3', V 4 @ 0', V 4 @ 1', V 5 @ 0', V 5 @ 4', V 6 @ 0', and V 6 @ 2') were collected from the soil bores and field-screened for concentrations of TPH with visual/olfactory observations and chloride utilizing a Hach Quantab® chloride test kit. The collected soil samples were submitted to a certified, commercial laboratory (henceforth, "the laboratory") for analysis of BTEX, TPH, and chloride concentrations. Laboratory analytical results indicated concentrations of BTEX ranged from below the laboratory method detection limit (MDL) in soil sample V 3 @ 3' to 247 mg/kg in soil sample V 2 @ 0'. Analytical results indicated TPH concentrations ranged from below the laboratory MDL in soil sample V 6 @ 2' to 62,200 mg/kg in soil sample in soil sample V 6 @ 0'. Chloride concentrations were below the NMOCD Closure Criterion in all of the submitted soil samples. Delineation at soil bore location V 2 was not achieved due to a resistance layer being met at five (5) feet below ground surface (bgs), which made further advancement by non-mechanical means impractical.

In addition, Etech collected twelve (12) horizontal delineation soil samples (EH 1 @ 0', EH 1 @ 1', NH 1 @ 0', NH 1 @ 1', NH 2 @ 0', NH 2 @ 1', SH 1 @ 0', SH 1 @ 1', SH 2 @ 0', SH 2 @ 1', WH 1 @ 0' and WH 1 @ 1') were collected from the soil bores and field-screened for concentrations of TPH with visual/olfactory observations and chloride utilizing a Hach Quantab® chloride test kit. The collected 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 NMOCD Closure Criteria in all of the submitted soil samples. Based on these laboratory analytical results, the horizontal extent of impacted soil was adequately defined.

A "Site and Sample Location Map" is provided as Figure 3. Soil chemistry data is summarized in Table 1. Field data and soil profile logs are provided as Appendix B. Laboratory analytical reports are provided as Appendix C.

5.0 RESTORATION, RECLAMATION, AND RE-VEGETATION PLAN

The release was limited to the production pad inside an active tank battery. Final remediation, reclamation, and revegetation will be conducted upon decommissioning and abandonment of the facility.

6.0 DEFERRAL REQUEST

On December 30, 2022, Etech returned to the site to continue the initial assessment. A backhoe was utilized to advance a delineation trench in the area characterized by sample location V 2 in an effort to further investigate the vertical extent of soil impacts. During the advancement of the delineation trench, an unmarked electrical line was struck, creating a situation which was immediately dangerous to life and health. Additional unmarked, high-voltage electrical lines were discovered during a subsequent inspection of the trench and adjacent area.

Further delineation and/or excavation of the area characterized by sample location V 2 poses a significant safety risk and would require a major facility deconstruction. As there is no vegetation or shallow groundwater present at the Site that would be affected, pursuant to Section 19.15.29.12.C(2) NMAC, leaving the contamination in-situ "does not cause an imminent risk to human health, the environment, or ground water".

Laboratory analytical results from delineation soil samples indicate concentrations of chloride are below the applicable NMOCD Closure Criteria. Remediation of BTEX and TPH-impacted soil affected above the NMOCD Closure Criteria remaining in-situ in the deferral area will be completed upon decommissioning and abandonment of the tank battery facility, in accordance with Sections 19.15.29.12 and 19.15.29.13 NMAC.

Locations of the proposed deferral areas are depicted on Figure 3. A photographic log is provided as Appendix D.

Based on laboratory analytical results and field activities conducted to date, Etech recommends Legacy Reserves Operating, LP, provide copies of this *Site Assessment Summary & Deferral Request* to the appropriate agencies and request deferral be granted to the Cooper Jal Unit #128.

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this Site Assessment Summary & Deferral 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 Legacy Reserves Operating, LP. Use of the information contained in this report is prohibited without the consent of Etech and/or Legacy Reserves Operating, LP.

8.0 DISTRIBUTION

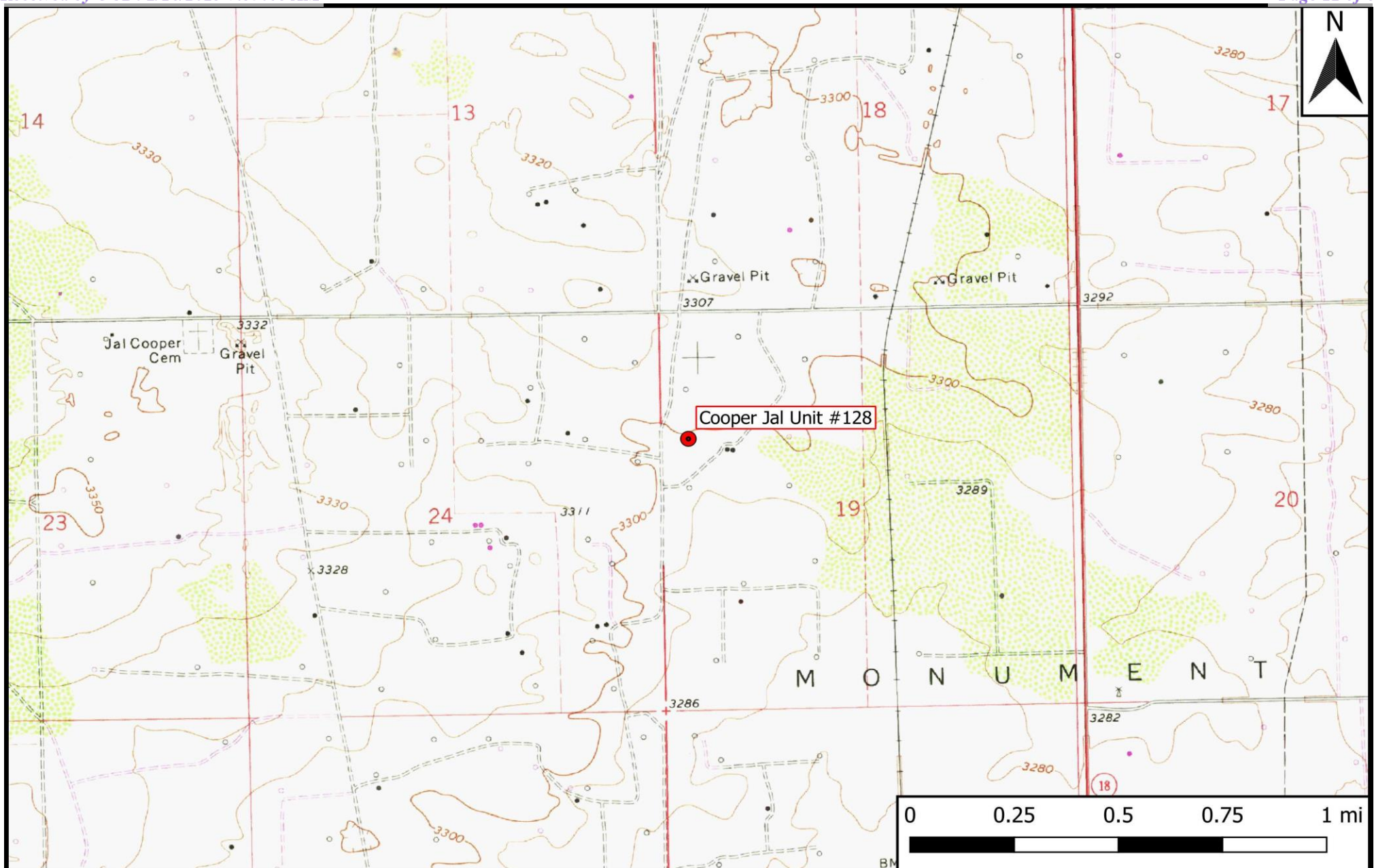
Legacy Reserves Operating, LP
303 W. Wall St.
Midland, TX 79701

New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1220 South St. Francis Drive
Santa Fe, NM 87505

(Electronic Submission)

Figure 1

Topographic Map



Legend

● Site Location

Figure 1

Topographic Map
 Legacy Reserves Operating, LP
 Cooper Jal Unit #128
 GPS: 32.205502, -103.20921
 Lea County

ETECH
 Environmental & Safety Solutions, Inc.

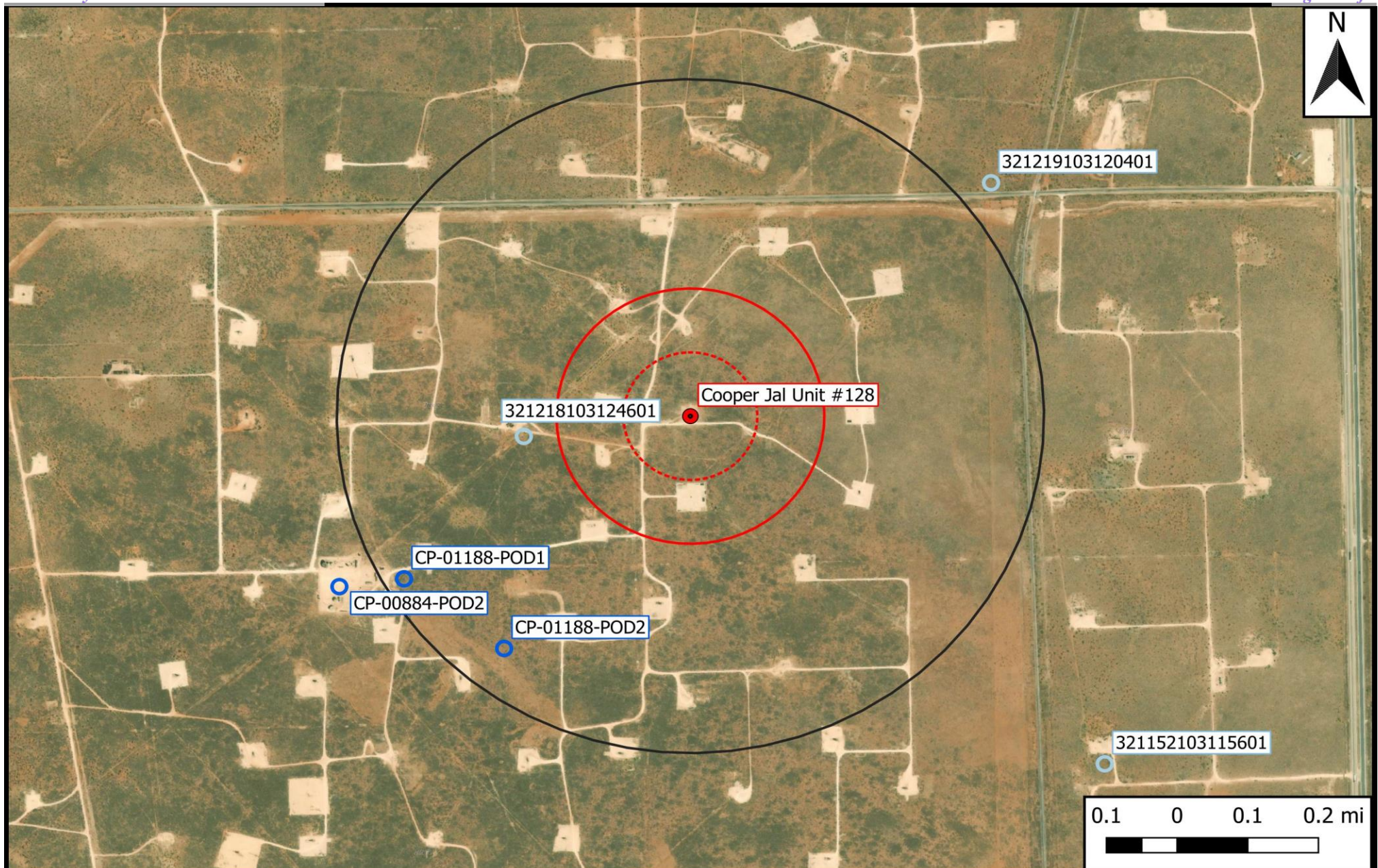
Drafted: mag

Checked: jwl

Date: 11/18/22

Figure 2

Aerial Proximity Map



Legend

- Site Location
- Well - NMOSE
- Well - USGS
- Potash Mine Workings
- Medium/High Karst
- 500 Ft Radius
- 1000 Ft Radius
- 0.5 Mi Radius
- 1% Annual Flood Chance
- Lake/Freshwater Pond
- Emergent/Forested Wetlands
- Riverine

Figure 2
 Aerial Proximity Map
 Legacy Reserves Operating, LP
 Cooper Jal Unit #128
 GPS: 32.205502, -103.20921
 Lea County



Drafted: mag

Checked: jwl

Date: 11/18/22

Figure 3

Site and Sample Location Map



Legend:

- Sample Point
- Horizontal Sample Point
- Release Area
- Proposed Deferral Area

Figure 3

Site and Sample Location Map
 Legacy Reserves Operating, LP
 Cooper Jal Unit #128
 GPS: 32.205361, -103.213569
 Lea County

eTECH
 Environmental & Safety Solutions, Inc.

Drafted: ZPC

Checked: ZPC

Date: 2/2/23

Table 1
Concentrations of BTEX, TPH, and Chloride in Soil

Table 1
Concentrations of BTEX, TPH, and Chloride in Soil
Legacy Reserves Operating, LP
Cooper Jal Unit #128
NMOCD Ref. #: nAPP2225627853

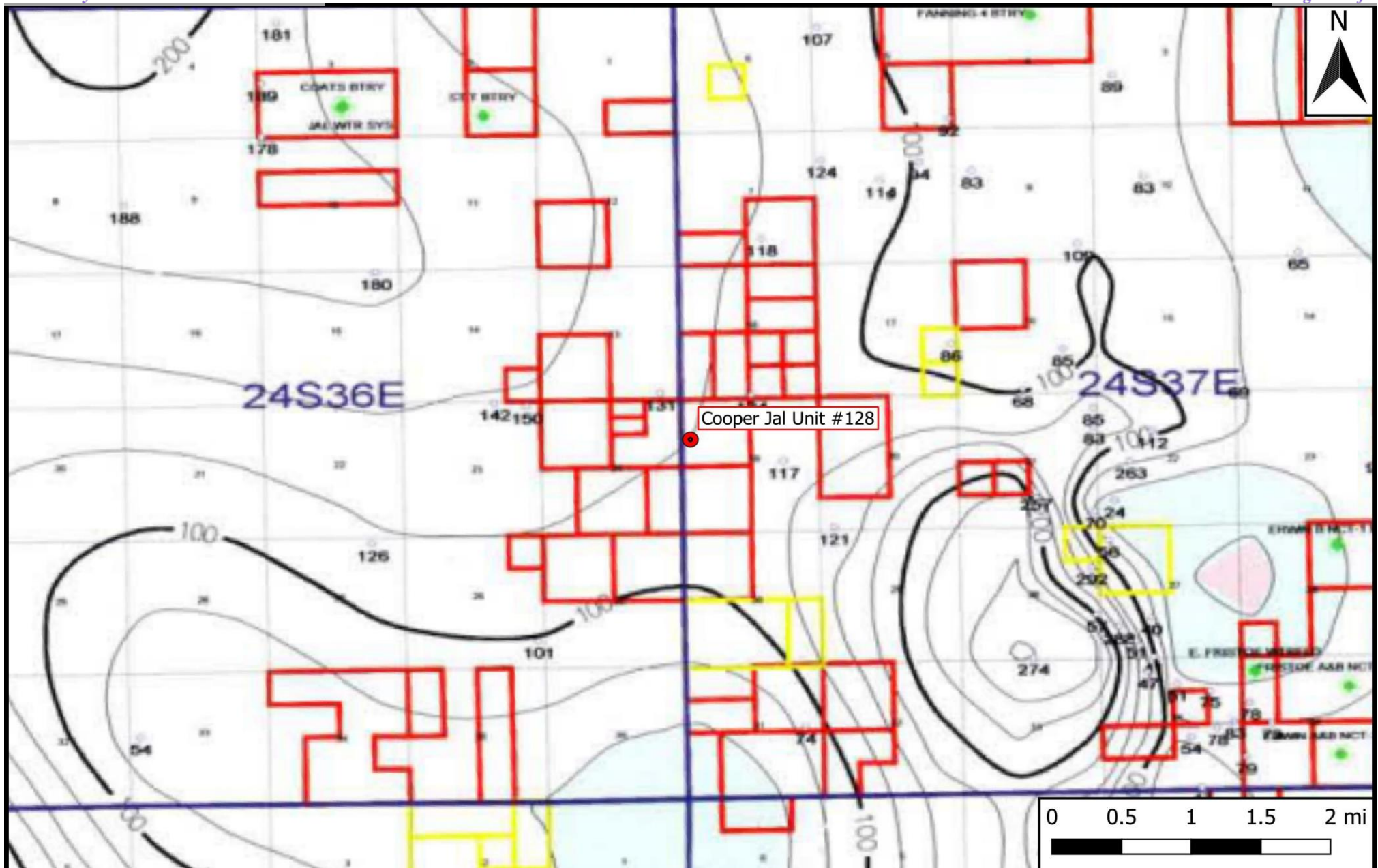
NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	20,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth (Feet)	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
EH 1 @ 0'	12/1/2022	0	In-Situ	<0.050	<0.300	<10.0	20.8	20.8	<10.0	20.8	2,200
EH 1 @ 1'	12/1/2022	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	992
NH 1 @ 0'	12/1/2022	0	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
NH 1 @ 1'	12/1/2022	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
NH 2 @ 0'	12/1/2022	0	In-Situ	<0.050	<0.300	<10.0	665	665	188	853	2,200
NH 2 @ 1'	12/1/2022	1	In-Situ	<0.050	<0.300	<10.0	12.3	12.3	<10.0	12.3	624
SH 1 @ 0'	12/1/2022	0	In-Situ	<0.050	<0.300	<10.0	432	432	181	613	176
SH 1 @ 1'	12/1/2022	1	In-Situ	<0.050	<0.300	<10.0	50.0	50.0	41.5	91.5	752
SH 2 @ 0'	12/1/2022	0	In-Situ	<0.050	<0.300	<10.0	10.9	10.9	<10.0	10.9	6,240
SH 2 @ 1'	12/1/2022	1	In-Situ	<0.050	<0.300	<10.0	544	544	346	890	1,840
WH 1 @ 0'	12/1/2022	0	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
WH 1 @ 1'	12/1/2022	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	160
V 1 @ 0'	11/30/2022	0	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
V 1 @ 1'	11/30/2022	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	256
V 2 @ 0'	11/30/2022	0	In-Situ	2.36	247	3,280	9,900	13,200	2,030	15,200	832
V 2 @ 2'	11/30/2022	2	In-Situ	0.327	31.4	547	3,140	3,690	934	4,620	1,340
V 2 @ 5' - R	12/1/2022	5	In-Situ	0.124	60.8	1,450	11,100	12,600	3,070	15,600	784
V 3 @ 0'	11/30/2022	0	In-Situ	0.132	13.8	70.0	1,980	2,050	700	2,750	6,000
V 3 @ 3'	11/30/2022	3	In-Situ	<0.050	<0.300	<10.0	86.7	86.7	32.6	119	1,040
V 4 @ 0'	11/30/2022	0	In-Situ	0.426	74.4	377	3,900	4,280	1,010	5,290	720
V 4 @ 1'	11/30/2022	1	In-Situ	<0.050	0.421	<10.0	207	207	107	314	2,600
V 5 @ 0'	11/30/2022	0	In-Situ	<0.050	0.837	<50.0	1,140	1,140	569	1,710	1,840
V 5 @ 4'	11/30/2022	4	In-Situ	<0.050	0.372	<10.0	358	358	121	479	608
V 6 @ 0'	12/1/2022	0	In-Situ	0.233	84.9	6,210	46,500	52,700	9,440	62,200	1,120
V 6 @ 2'	12/1/2022	2	In-Situ	<0.050	0.400	<10.0	<10.0	<20.0	<10.0	<30.0	464

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
 Legacy Reserves Operating, LP
 Cooper Jal Unit #128
 GPS: 32.205502, -103.20921
 Lea County



Drafted: mag

Checked: jwl

Date: 11/18/22



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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



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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD																
POD Number	Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column	
		CP		LE	3	2										4
CP 01188 POD2		CP	LE	3	2	4	24	24S	36E	668359	3564067		696	171	134	37
CP 01188 POD1		CP	LE	2	1	4	24	24S	36E	668131	3564233		758	176	136	40

Average Depth to Water: **135 feet**

Minimum Depth: **134 feet**

Maximum Depth: **136 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 668783.29

Northing (Y): 3564620.46

Radius: 804.67

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


11/18/22 12:16 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 01188 POD1	2	1	4	24	24S	36E	668131	3564233 

Driller License: 1271 **Driller Company:** (DUPLICATE) HARRISON & COOPER, INC.

Driller Name: KENNY COOPER

Drill Start Date: 09/30/2013 **Drill Finish Date:** 09/30/2013 **Plug Date:**

Log File Date: 08/29/2014 **PCW Rev Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 20 GPM

Casing Size: 4.00 **Depth Well:** 176 feet **Depth Water:** 136 feet

Water Bearing Stratifications:	Top	Bottom	Description
	0	163	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	136	176

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


11/18/22 12:17 PM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tw	Rng	X	Y
CP 01188	POD2	3	2	4	24	24S	36E	668359	3564067 

Driller License: 1271 **Driller Company:** (DUPLICATE) HARRISON & COOPER, INC.

Driller Name: KENNY COOPER

Drill Start Date: 09/30/2013 **Drill Finish Date:** 09/30/2013 **Plug Date:**

Log File Date: 08/29/2014 **PCW Rev Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 5 GPM

Casing Size: 4.00 **Depth Well:** 171 feet **Depth Water:** 134 feet

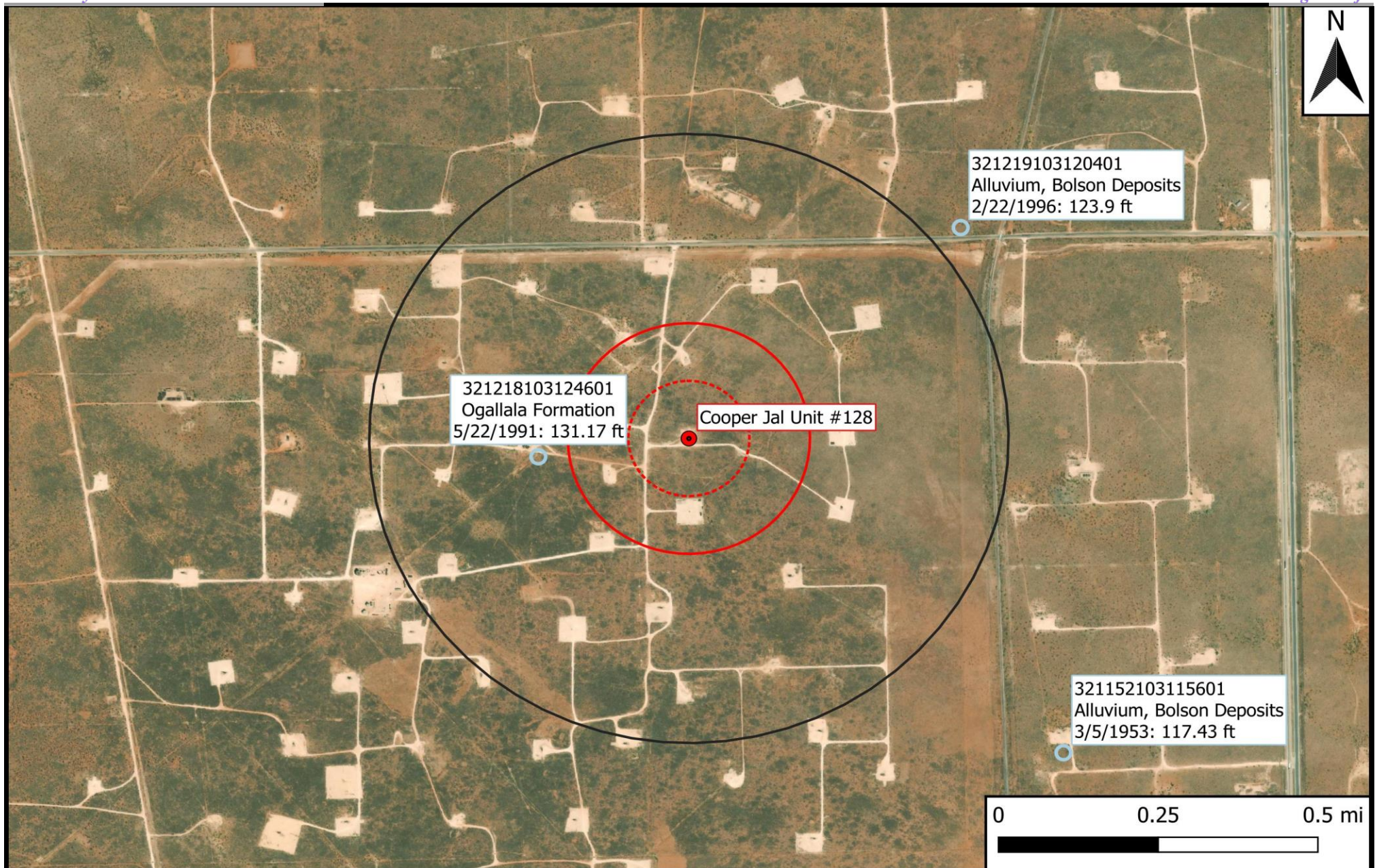
Water Bearing Stratifications:	Top	Bottom	Description
	0	168	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	131	171

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

11/18/22 12:17 PM

POINT OF DIVERSION SUMMARY



Legend

- Site Location
- Well - USGS
- ⊞ 500 Ft Radius
- ⊞ 1000 Ft Radius
- ⊞ 0.5 Mi Radius

Figure 5

USGS Well Proximity Map
Legacy Reserves Operating, LP
Cooper Jal Unit #128
GPS: 32.205502, -103.20921
Lea County



Drafted: mag

Checked: jwl

Date: 11/18/22



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

[Click for News Bulletins](#)

[Groundwater levels for the Nation](#)

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 321152103115601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 321152103115601 24S.37E.19.234442

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°11'52", Longitude 103°11'56" NAD27

Land-surface elevation 3,280 feet above NAVD88

The depth of the well is 160 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

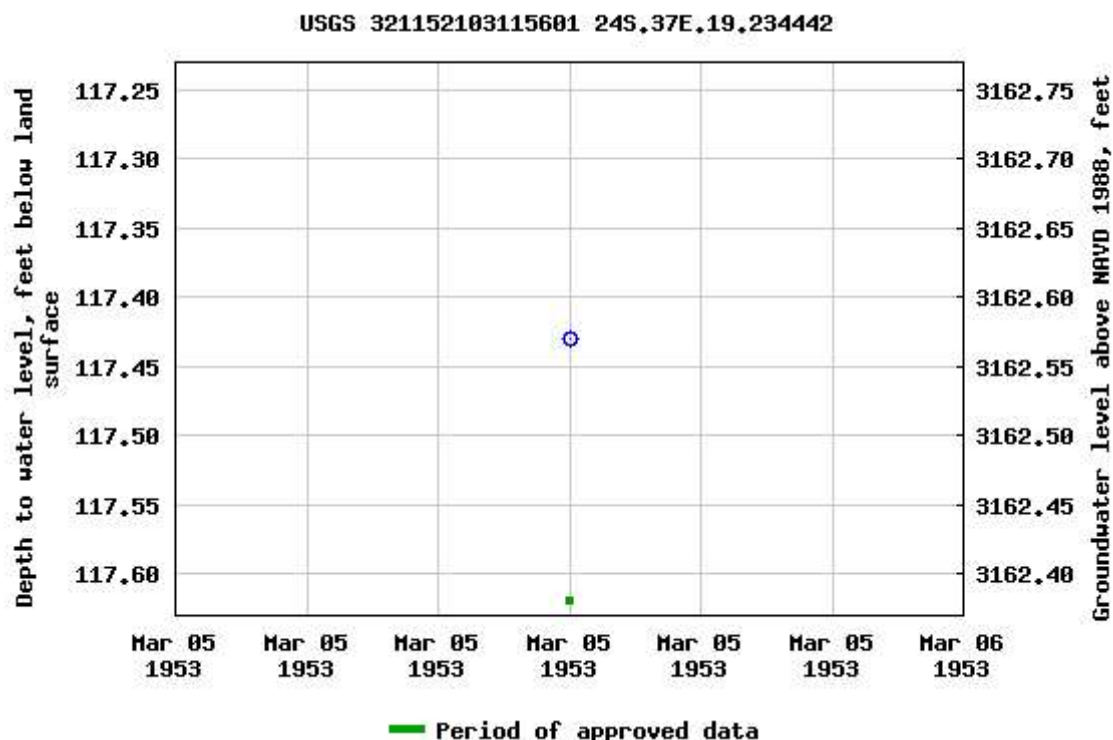
Output formats

[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](#)

[Accessibility](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2022-11-18 14:14:04 EST

0.58 0.48 nadww01





[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

[Click for News Bulletins](#)

[Groundwater levels for the Nation](#)

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 321218103124601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 321218103124601 24S.36E.13.44342

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°12'18", Longitude 103°12'46" NAD27

Land-surface elevation 3,305 feet above NAVD88

The depth of the well is 151 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

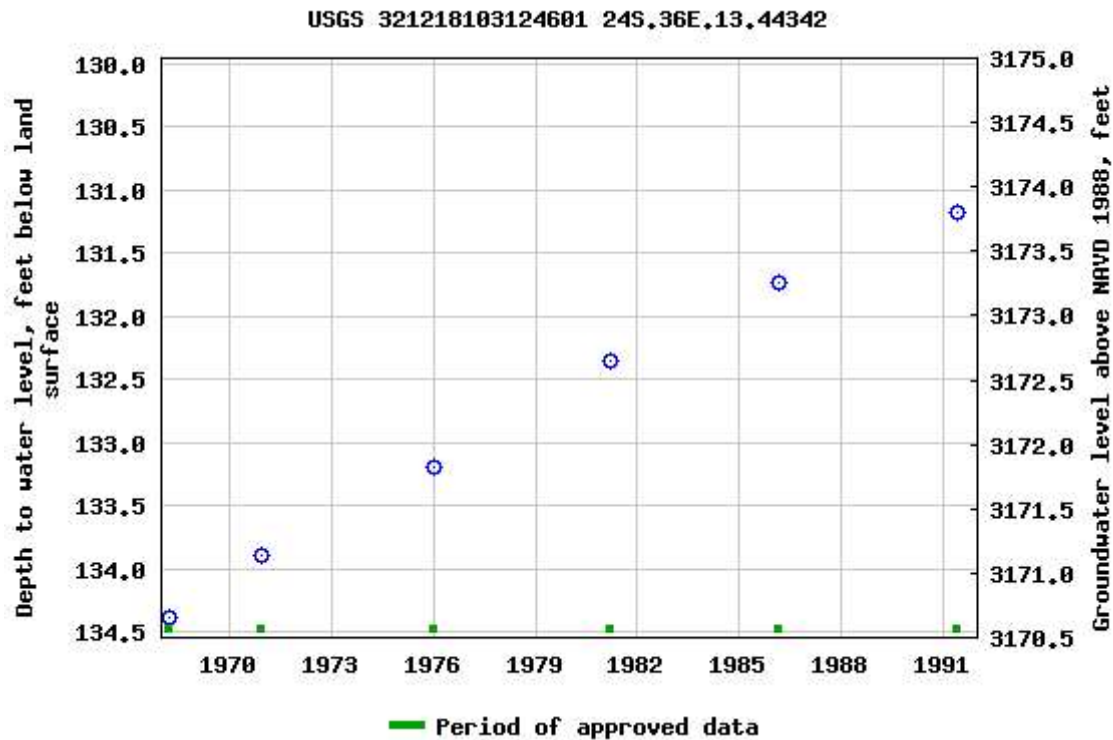
Output formats

[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](#)

[Accessibility](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2022-11-18 14:14:05 EST

0.62 0.49 nadww01





[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

[Click for News Bulletins](#)

[Groundwater levels for the Nation](#)

! Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 321219103120401

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 321219103120401 24S.37E.18.433332

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°12'37", Longitude 103°12'05" NAD27

Land-surface elevation 3,302.10 feet above NGVD29

The depth of the well is 150 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

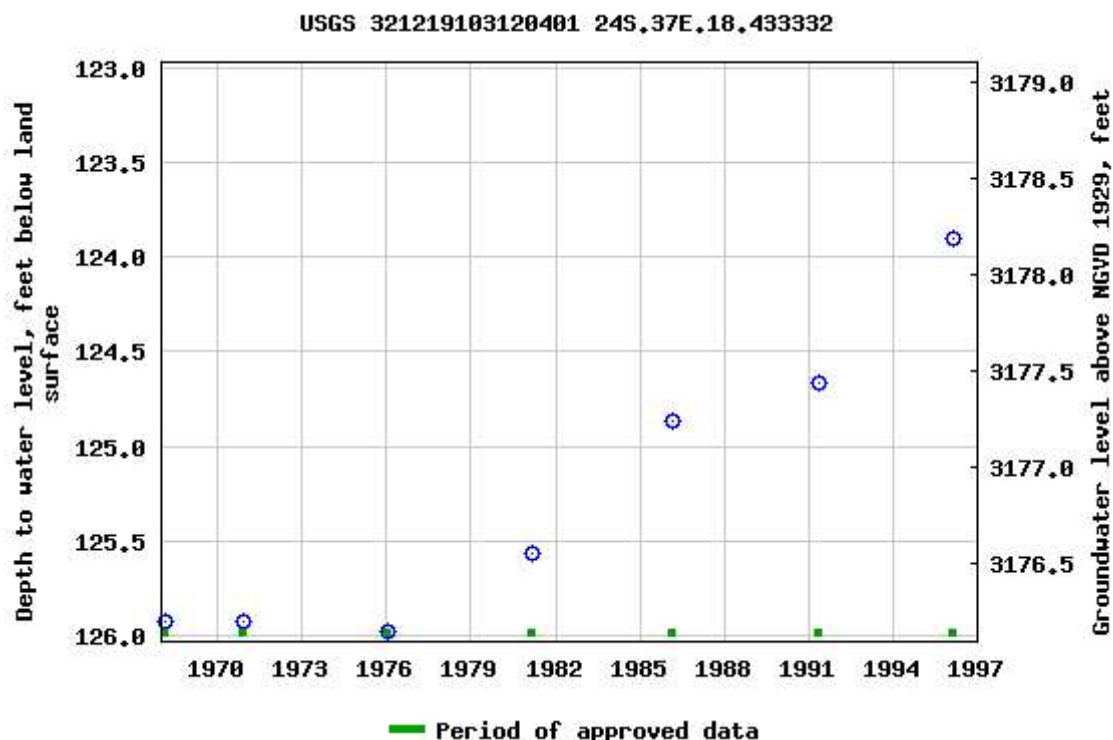
Output formats

[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](#)

[Accessibility](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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: 2022-11-18 14:14:05 EST

0.53 0.45 nadww01



Appendix B

Field Data and Soil Profile Logs



Sample Log

Date: 11/30/22

Project: Cooper Jal Unit #128

Project Number: 17131Latitude: 32.205361Longitude: -103.213569

Sample ID	PID/Odor	Chloride Conc.		GPS
V1e0'	—	3.6	500	
V1e1'	—	4.2	660	
V2e0'	Yes	6.4	1900	
V2e2'	Yes	7.2	1968	
V3e0'	Y	9.4	>2444 6.4 7392	
V3e1'	Y	9.0	>2444 5.4 5060	
V4e0'	Y	5.8	1220	
V4e1'	Slight	7.8	2444	
V5e0'	Slight	7.4	2112	
V5e1'	Y	6.4	1500	
V2e4'-R	Y	3.4	452	
V3e2'	Y	7.8	2444	
V5e3'	slight	5.8	1220	
V5e2'	Slight	7.6	2272	
V5e3'	Slight	6.6	1604	
V5e4'	Slight	4.8	844	
12/1/22		12/1/22		
SH1e0'	Slight	3.0	368	
SH1e1'	—	5.6	1132	
SH2e0'	—	9.4	>2444 6.8 8604	
SH2e1'	Slight	7.2	1968	
NH1e0'	—	4.0	604	
NH1e1'	—	1.4	124	
NH2e0'	Slight	7.4	2112	
NH2e1'	—	4.8	844	
EH1e0'	Slight	7.4	2112	
EH1e1'	—	5.6	1138	new strip
EH2e0'	—	2.6	300	
EH2e1'	—	4.0	628	
V2e5'-R	Yes	6.0	1364	
V6e0'	Yes	5.8	1272	
V6e1'	Slight	6.0	1364	
V6e2'	—	4.0	628	

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



Soil Profile

Date: 11/30/22

Project: Cooper Jal Unit #128

Project Number: 17131 Latitude: 32.205361 Longitude: -103.213569

Depth (ft. bgs)

Description

1	Red Sand
2	
3	
4	Red Sand/Caliche
5	Caliche
6	Caliche
7	Caliche -
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	

Appendix C

Laboratory Analytical Reports



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

December 08, 2022

ZACH CONDER

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: COOPER JAL UNIT #128

Enclosed are the results of analyses for samples received by the laboratory on 12/02/22 14:50.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 1 @ 0' (H225663-01)

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	12/05/2022	ND	2.15	108	2.00	1.26	
Toluene*	<0.050	0.050	12/05/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	<0.050	0.050	12/05/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	<0.150	0.150	12/05/2022	ND	6.46	108	6.00	1.36	
Total BTX	<0.300	0.300	12/05/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

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	12/06/2022	ND	448	112	400	3.64	

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	12/05/2022	ND	203	102	200	5.98	
DRO >C10-C28*	<10.0	10.0	12/05/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 103 % 45.3-161

Surrogate: 1-Chlorooctadecane 103 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 1 @ 1' (H225663-02)

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	12/05/2022	ND	2.15	108	2.00	1.26	
Toluene*	<0.050	0.050	12/05/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	<0.050	0.050	12/05/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	<0.150	0.150	12/05/2022	ND	6.46	108	6.00	1.36	
Total BTEX	<0.300	0.300	12/05/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	12/06/2022	ND	448	112	400	3.64		

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	12/05/2022	ND	203	102	200	5.98	
DRO >C10-C28*	<10.0	10.0	12/05/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 86.4 % 45.3-161

Surrogate: 1-Chlorooctadecane 85.2 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 2 @ 0' (H225663-03)

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.36	1.00	12/06/2022	ND	2.15	108	2.00	1.26	
Toluene*	42.6	1.00	12/06/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	51.8	1.00	12/06/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	150	3.00	12/06/2022	ND	6.46	108	6.00	1.36	
Total BTEX	247	6.00	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 145 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	12/06/2022	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	3280	100	12/05/2022	ND	203	102	200	5.98	
DRO >C10-C28*	9900	100	12/05/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	2030	100	12/05/2022	ND					

Surrogate: 1-Chlorooctane 238 % 45.3-161

Surrogate: 1-Chlorooctadecane 204 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 2 @ 2' (H225663-04)

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.327	0.100	12/07/2022	ND	2.15	108	2.00	1.26	
Toluene*	2.58	0.100	12/07/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	12.0	0.100	12/07/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	16.6	0.300	12/07/2022	ND	6.46	108	6.00	1.36	
Total BTEX	31.4	0.600	12/07/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 340 % 69.9-140

Chloride, SM4500Cl-B			mg/kg					Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	12/06/2022	ND	448	112	400	3.64	

TPH 8015M			mg/kg					Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	547	100	12/05/2022	ND	203	102	200	5.98	
DRO >C10-C28*	3140	100	12/05/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	934	100	12/05/2022	ND					

Surrogate: 1-Chlorooctane 146 % 45.3-161

Surrogate: 1-Chlorooctadecane 172 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 2 @ 5'-R (H225663-05)

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.124	0.100	12/06/2022	ND	2.15	108	2.00	1.26	
Toluene*	5.13	0.100	12/06/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	15.3	0.100	12/06/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	40.3	0.300	12/06/2022	ND	6.46	108	6.00	1.36	
Total BTEX	60.8	0.600	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 389 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	12/06/2022	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1450	100	12/05/2022	ND	203	102	200	5.98	
DRO >C10-C28*	11100	100	12/05/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	3070	100	12/05/2022	ND					

Surrogate: 1-Chlorooctane 185 % 45.3-161

Surrogate: 1-Chlorooctadecane 243 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 3 @ 0' (H225663-06)

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.132	0.050	12/06/2022	ND	2.15	108	2.00	1.26	
Toluene*	2.19	0.050	12/06/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	3.19	0.050	12/06/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	8.27	0.150	12/06/2022	ND	6.46	108	6.00	1.36	
Total BTEx	13.8	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 198 % 69.9-140

Chloride, SM4500CI-B			mg/kg					Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6000	16.0	12/06/2022	ND	448	112	400	3.64	

TPH 8015M			mg/kg					Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	70.0	50.0	12/05/2022	ND	203	102	200	5.98	
DRO >C10-C28*	1980	50.0	12/05/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	700	50.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 111 % 45.3-161

Surrogate: 1-Chlorooctadecane 171 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 3 @ 3' (H225663-07)

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	12/06/2022	ND	2.15	108	2.00	1.26	
Toluene*	<0.050	0.050	12/06/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	0.150	0.150	12/06/2022	ND	6.46	108	6.00	1.36	
Total BTEX	<0.300	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1040	16.0	12/06/2022	ND	448	112	400	3.64		

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	12/06/2022	ND	203	102	200	5.98	
DRO >C10-C28*	86.7	10.0	12/06/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	32.6	10.0	12/06/2022	ND					

Surrogate: 1-Chlorooctane 93.9 % 45.3-161

Surrogate: 1-Chlorooctadecane 90.0 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 4 @ 0' (H225663-08)

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.426	0.100	12/06/2022	ND	2.15	108	2.00	1.26	
Toluene*	10.5	0.100	12/06/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	16.3	0.100	12/06/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	47.2	0.300	12/06/2022	ND	6.46	108	6.00	1.36	
Total BTEX	74.4	0.600	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 240 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	12/06/2022	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	377	50.0	12/06/2022	ND	178	89.1	200	10.3	
DRO >C10-C28*	3900	50.0	12/06/2022	ND	193	96.4	200	9.36	
EXT DRO >C28-C36	1010	50.0	12/06/2022	ND					

Surrogate: 1-Chlorooctane 113 % 45.3-161

Surrogate: 1-Chlorooctadecane 210 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 4 @ 1' (H225663-09)

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	12/06/2022	ND	2.15	108	2.00	1.26	
Toluene*	0.061	0.050	12/06/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	0.074	0.050	12/06/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	0.271	0.150	12/06/2022	ND	6.46	108	6.00	1.36	
Total BTEX	0.421	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2600	16.0	12/06/2022	ND	448	112	400	3.64	

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	12/07/2022	ND	178	89.1	200	10.3	
DRO >C10-C28*	207	10.0	12/07/2022	ND	193	96.4	200	9.36	
EXT DRO >C28-C36	107	10.0	12/07/2022	ND					

Surrogate: 1-Chlorooctane 91.5 % 45.3-161

Surrogate: 1-Chlorooctadecane 119 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 5 @ 0' (H225663-10)

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	12/06/2022	ND	2.15	108	2.00	1.26		
Toluene*	0.071	0.050	12/06/2022	ND	2.15	107	2.00	1.64		
Ethylbenzene*	0.176	0.050	12/06/2022	ND	2.11	105	2.00	0.280		
Total Xylenes*	0.577	0.150	12/06/2022	ND	6.46	108	6.00	1.36		
Total BTEX	0.837	0.300	12/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1840	16.0	12/06/2022	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	12/06/2022	ND	203	102	200	5.98	
DRO >C10-C28*	1140	50.0	12/06/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	569	50.0	12/06/2022	ND					

Surrogate: 1-Chlorooctane 109 % 45.3-161

Surrogate: 1-Chlorooctadecane 192 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 5 @ 4' (H225663-11)

BTEx 8021B		mg/kg	Analyzed By: JH					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/06/2022	ND	2.15	108	2.00	1.26	
Toluene*	<0.050	0.050	12/06/2022	ND	2.15	107	2.00	1.64	
Ethylbenzene*	0.121	0.050	12/06/2022	ND	2.11	105	2.00	0.280	
Total Xylenes*	0.227	0.150	12/06/2022	ND	6.46	108	6.00	1.36	
Total BTEX	0.372	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 178 % 69.9-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	12/06/2022	ND	448	112	400	3.64	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/06/2022	ND	203	102	200	5.98	
DRO >C10-C28*	358	10.0	12/06/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	121	10.0	12/06/2022	ND					

Surrogate: 1-Chlorooctane 104 % 45.3-161

Surrogate: 1-Chlorooctadecane 96.0 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 6 @ 0' (H225663-12)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.233	0.200	12/07/2022	ND	2.21	110	2.00	8.56	S-04
Toluene*	8.16	0.200	12/07/2022	ND	2.21	111	2.00	8.33	S-04
Ethylbenzene*	19.8	0.200	12/07/2022	ND	2.23	111	2.00	8.16	S-04
Total Xylenes*	56.6	0.600	12/07/2022	ND	6.71	112	6.00	8.95	S-04
Total BTEX	84.9	1.20	12/07/2022	ND					S-04

Surrogate: 4-Bromofluorobenzene (PID) 147 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1120	16.0	12/06/2022	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	6210	50.0	12/07/2022	ND	203	102	200	5.98		
DRO >C10-C28*	46500	50.0	12/07/2022	ND	186	92.8	200	1.88		
EXT DRO >C28-C36	9440	50.0	12/07/2022	ND						

Surrogate: 1-Chlorooctane 936 % 45.3-161

Surrogate: 1-Chlorooctadecane 978 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: V 6 @ 2' (H225663-13)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56	
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33	
Ethylbenzene*	0.091	0.050	12/06/2022	ND	2.23	111	2.00	8.16	
Total Xylenes*	0.281	0.150	12/06/2022	ND	6.71	112	6.00	8.95	
Total BTEX	0.400	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	12/06/2022	ND	448	112	400	3.64	

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	12/05/2022	ND	203	102	200	5.98	
DRO >C10-C28*	<10.0	10.0	12/05/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 80.9 % 45.3-161

Surrogate: 1-Chlorooctadecane 78.9 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: NH 1 @ 0' (H225663-14)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56		
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33		
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16		
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95		
Total BTEX	<0.300	0.300	12/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

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	12/06/2022	ND	448	112	400	3.64		

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	12/05/2022	ND	203	102	200	5.98	
DRO >C10-C28*	<10.0	10.0	12/05/2022	ND	186	92.8	200	1.88	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 93.1 % 45.3-161

Surrogate: 1-Chlorooctadecane 90.1 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: NH 1 @ 1' (H225663-15)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56		
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33		
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16		
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95		
Total BTEX	<0.300	0.300	12/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 69.9-140

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	12/06/2022	ND	448	112	400	3.64		

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	12/05/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	<10.0	10.0	12/05/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 90.6 % 45.3-161

Surrogate: 1-Chlorooctadecane 98.4 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: NH 2 @ 0' (H225663-16)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56		
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33		
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16		
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95		
Total BTEX	<0.300	0.300	12/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2200	16.0	12/06/2022	ND	432	108	400	3.64	QM-07	

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	12/06/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	665	10.0	12/06/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	188	10.0	12/06/2022	ND					

Surrogate: 1-Chlorooctane 75.6 % 45.3-161

Surrogate: 1-Chlorooctadecane 119 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: NH 2 @ 1' (H225663-17)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56		
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33		
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16		
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95		
Total BTEx	<0.300	0.300	12/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	624	16.0	12/06/2022	ND	432	108	400	3.64		

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	12/05/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	12.3	10.0	12/05/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 87.1 % 45.3-161

Surrogate: 1-Chlorooctadecane 94.5 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: EH 1 @ 0' (H225663-18)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56		
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33		
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16		
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95		
Total BTEX	<0.300	0.300	12/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2200	16.0	12/06/2022	ND	432	108	400	3.64		

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	12/05/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	20.8	10.0	12/05/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 94.5 % 45.3-161

Surrogate: 1-Chlorooctadecane 104 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: EH 1 @ 1' (H225663-19)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56	
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33	
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16	
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95	
Total BTX	<0.300	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	992	16.0	12/06/2022	ND	432	108	400	3.64		

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	12/05/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	<10.0	10.0	12/05/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 99.8 % 45.3-161

Surrogate: 1-Chlorooctadecane 109 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: SH 1 @ 0' (H225663-20)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56	
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33	
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16	
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95	
Total BTEX	<0.300	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	12/06/2022	ND	432	108	400	3.64	

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	12/06/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	432	10.0	12/06/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	181	10.0	12/06/2022	ND					

Surrogate: 1-Chlorooctane 107 % 45.3-161

Surrogate: 1-Chlorooctadecane 143 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	11/30/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: SH 1 @ 1' (H225663-21)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56	
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33	
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16	
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95	
Total BTEX	<0.300	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	752	16.0	12/06/2022	ND	432	108	400	3.64		

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	12/06/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	50.0	10.0	12/06/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	41.5	10.0	12/06/2022	ND					

Surrogate: 1-Chlorooctane 95.7 % 45.3-161

Surrogate: 1-Chlorooctadecane 106 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: SH 2 @ 0' (H225663-22)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56	
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33	
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16	
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95	
Total BTEX	<0.300	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6240	16.0	12/06/2022	ND	432	108	400	3.64		

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	12/05/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	10.9	10.0	12/05/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 91.6 % 45.3-161

Surrogate: 1-Chlorooctadecane 100 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: SH 2 @ 1' (H225663-23)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56	
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33	
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16	
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95	
Total BTEX	<0.300	0.300	12/06/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1840	16.0	12/06/2022	ND	432	108	400	3.64		

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	12/06/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	544	10.0	12/06/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	346	10.0	12/06/2022	ND					

Surrogate: 1-Chlorooctane 92.5 % 45.3-161

Surrogate: 1-Chlorooctadecane 134 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: WH 1 @ 0' (H225663-24)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56		
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33		
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16		
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95		
Total BTEX	<0.300	0.300	12/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	12/06/2022	ND	432	108	400	3.64		

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	12/05/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	<10.0	10.0	12/05/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 91.9 % 45.3-161

Surrogate: 1-Chlorooctadecane 99.4 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Analytical Results For:

Etech Environmental & Safety Solutions
 ZACH CONDER
 2617 W MARLAND
 HOBBS NM, 88240
 Fax To:

Received:	12/02/2022	Sampling Date:	12/01/2022
Reported:	12/08/2022	Sampling Type:	Soil
Project Name:	COOPER JAL UNIT #128	Sampling Condition:	Cool & Intact
Project Number:	17131	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - LEA CO NM		

Sample ID: WH 1 @ 1' (H225663-25)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/06/2022	ND	2.21	110	2.00	8.56		
Toluene*	<0.050	0.050	12/06/2022	ND	2.21	111	2.00	8.33		
Ethylbenzene*	<0.050	0.050	12/06/2022	ND	2.23	111	2.00	8.16		
Total Xylenes*	<0.150	0.150	12/06/2022	ND	6.71	112	6.00	8.95		
Total BTEx	<0.300	0.300	12/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	12/06/2022	ND	432	108	400	3.64	

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	12/05/2022	ND	183	91.4	200	5.22	
DRO >C10-C28*	<10.0	10.0	12/05/2022	ND	176	88.0	200	0.916	
EXT DRO >C28-C36	<10.0	10.0	12/05/2022	ND					

Surrogate: 1-Chlorooctane 83.6 % 45.3-161

Surrogate: 1-Chlorooctadecane 91.0 % 46.3-178

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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



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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

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

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



ARDINAL LABORATORIES

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

Page 1 of 3

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Etech Environmental & Safety Solutions, Inc.

P.O. #: Company: Etech Environmental

Address: 2617 W Marland Attn: Joel Lowry

City: Hobbs Address: 2617 W. Marland

Phone #: (575) 264-9884 Fax #: Hobbs

Project #: 17131 Project Owner: Legacy

Project Name: Cooper Jal Unit #128 State: NM Zip: 88240

Project Location: Rural Lea County, NM Phone #: (575) 264-9884

Sample Name: Matthew Grieco Fax #:

FOR LAB USE ONLY

Lab I.D. Sample I.D.

DATE TIME

Chloride

TPH (8015M)

BTEX (8021B)

<



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 3 of 3

BILL TO

ANALYSIS REQUEST

Company Name: Ettech Environmental & Safety Solutions, Inc.

P.O. #: Company Ettech Environmental

Attn: Joel Lowry

Address: 2617 W. Marland

City: Hobbs

State: NM Zip: 88240

Phone #: (575) 264-9884

Fax #:

Project Manager: Zach Conder

Address: 2617 W Marland

City: Hobbs

State: NM Zip: 88240

Phone #: (575) 264-9884

Fax #:

Project #: 17131

Project Owner: Legacy

Project Name: Cooper Jal Unit #128

Project Location: Rural Lea County, NM

Sampler Name: Matthew Grieco

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H225663

21 SH1 @ 1'

22 SH2 @ 0'

23 SH2 @ 1'

24 WH1 @ 0'

25 WH1 @ 1'

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

Chloride

TPH (8015M)

BTEX (8021B)

Relinquished By:

Date: 12-2-22

Received By:

Phone Result:

Yes

No

Add'l Phone #:

Add'l Fax #:

Relinquished By:

Date: 12-2-22

Received By:

Phone Result:

Yes

No

Add'l Phone #:

Add'l Fax #:

Relinquished By:

Date: 12-2-22

Received By:

Phone Result:

Yes

No

Add'l Phone #:

Add'l Fax #:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

FORM-006

Revision 1.0

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

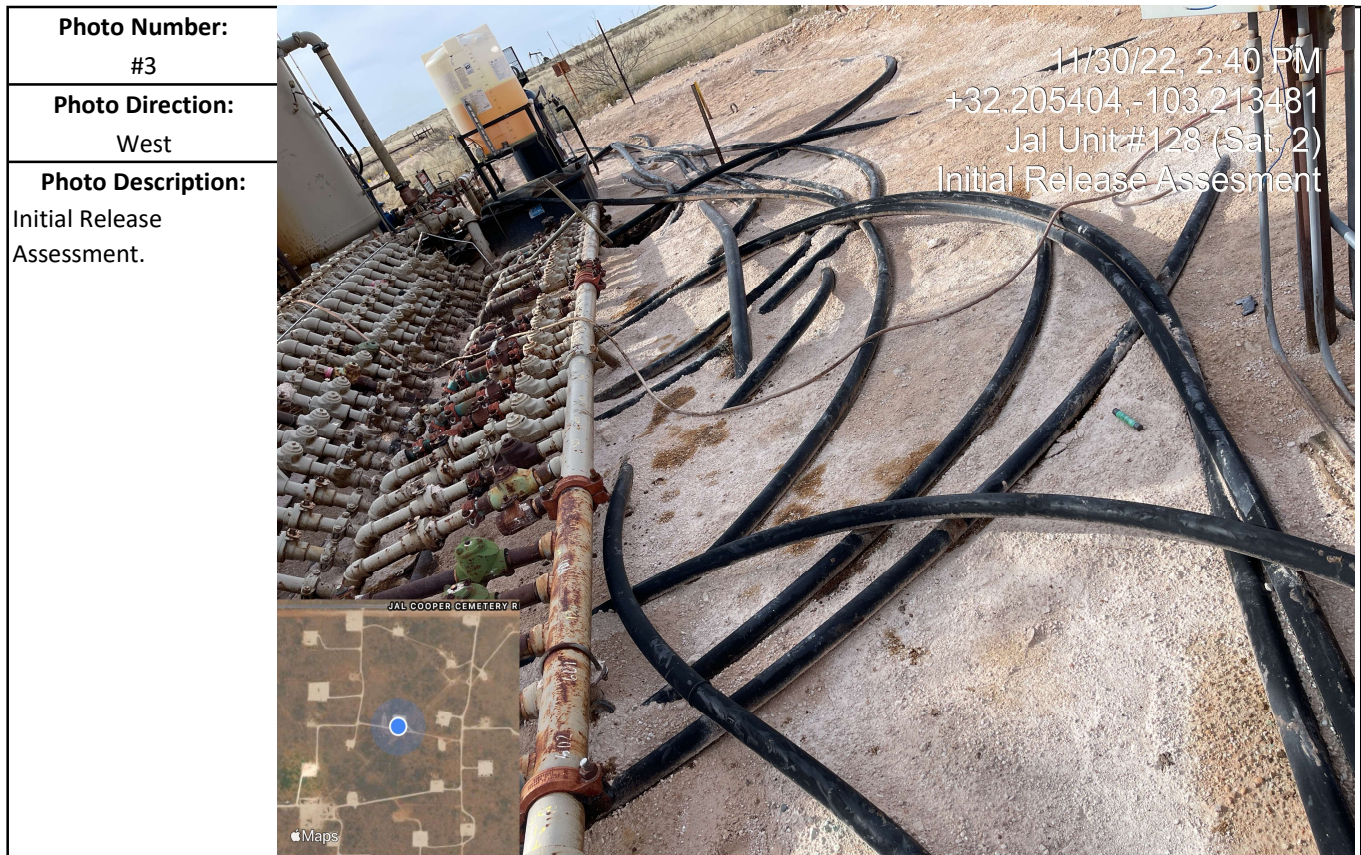
Appendix D

Photographic Log

Photographic Log



Photographic Log



Photographic Log



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 186920

CONDITIONS

Operator: LEGACY RESERVES OPERATING, LP 15 Smith Road Midland, TX 79705	OGRID: 240974
	Action Number: 186920
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Deferral Request Approved. The Deferral Request and C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue. The OCD will not close a release, where contaminants are left in place, due to close proximity to equipment. The incident will only be closed after all contaminated soil has been remediated to meet OCD Spill Rule Standards.	2/28/2023