

Incident ID	nAPP2122448965
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>106</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	nAPP2122448965
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: Dean D. Ericson Title: Sr. Environmental Specialist

Signature: Dean D. Ericson Date: 12/14/22

email: dean.ericson@energytransfer.com Telephone: 432-238-2142

**OCD Only**

Received by: Jocelyn Harimon Date: 12/15/2022

Incident ID	nAPP2122448965
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Dean D. Ericson Title: Sr. Environmental Specialist

Signature: Dean D. Ericson Date: 12/14/22

email: dean.ericson@energytransfer.com Telephone: (432)238-2142

### OCD Only

Received by: Jocelyn Harimon Date: 12/15/2022

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

Closure Approved by: Jennifer Nobui Date: 01/12/2023

Printed Name: Jennifer Nobui Title: Environmental Specialist A

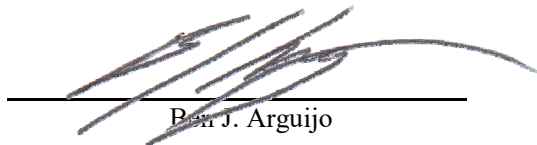
## Remediation Summary & Soil Closure Request

### ETC Texas Pipeline, Ltd. 16-NM-R001-1351 Pipeline

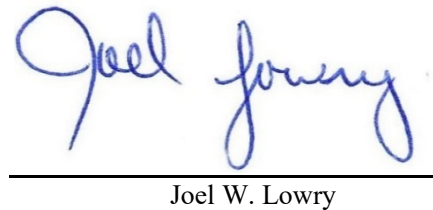
Lea County, New Mexico  
Unit Letter "I", Section 31, Township 23 South, Range 37 East  
Latitude 32.25841 North, Longitude 103.19612 West  
NMOCD Reference No. nAPP2122448965

Prepared By:

**Etech Environmental & Safety Solutions, Inc.**  
6309 Indiana Ave., Suite D  
Lubbock, TX 79413



Ben J. Arguijo



Joel W. Lowry



Midland • San Antonio • Lubbock • Hobbs • Lafayette



## TABLE OF CONTENTS

	<i>Section</i>
PROJECT INFORMATION.....	<b>1.0</b>
SITE CHARACTERIZATION.....	<b>2.0</b>
CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE.....	<b>3.0</b>
INITIAL SITE ASSESSMENT.....	<b>4.0</b>
REMEDIATION ACTIVITIES SUMMARY.....	<b>5.0</b>
RESTORATION, RECLAMATION & RE-VEGETATION PLAN.....	<b>6.0</b>
SOIL CLOSURE REQUEST.....	<b>7.0</b>
LIMITATIONS.....	<b>8.0</b>
DISTRIBUTION.....	<b>9.0</b>

### FIGURES

- Figure 1 - Topographic Map
- Figure 2 - Site Characterization Map
- Figure 3 - Site & Sample Location Map

### TABLES

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

### APPENDICES

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

**1.0 PROJECT INFORMATION**

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of ETC Texas Pipeline, Ltd., has prepared this *Remediation Summary & Soil Closure Request* for the release site known as the 16-NM-R001-1351 Pipeline (henceforth, "Site"). Details of the release are summarized below:

**Location of Release Source**

Latitude: 32.25841 Longitude: -103.19612

Provided GPS are in WGS84 format.

Site Name: <u>16-NM-R001-1351 Pipeline</u>	Site Type: <u>Pipeline</u>
Date Release Discovered: <u>7/30/2021</u>	API # (if applicable): <u>N/A</u>

Unit Letter	Section	Township	Range	County
"I"	31	23S	37E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name Deep Wells Ranch, Inc.)

**Nature and Volume of Release**

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water > 10,000 mg/L?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf) <u>78</u>	Volume Recovered (Mcf) <u>0</u>
<input checked="" type="checkbox"/> Other (describe) Pipeline liquids	Volume/Weight Released (bbls) <u>13.06</u>	Volume/Weight Recovered (bbls) <u>3</u>

**Cause of Release:**

The release was attributed to corrosion of a pipeline segment. The line was blown-down for repair, then purged to put back in service.

**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?	106'		
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) and Fish & Wildlife Services (FWS) shapefiles, topographic maps, NMOSE and USGS databases, and aerial imagery. The results are depicted in Figures 1, 2, 4, and 5.

## 3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

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

Probable Depth to Groundwater	Constituent	Laboratory Analytical Method	Closure Criteria*†	Reclamation Standard*‡
106'	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	N/A
	Benzene	EPA SW-846 Methods 8021b or 8260b	10	10
	Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA SW-846 Methods 8021b or 8260b	50	50

\* Measured in milligrams per kilogram (mg/kg)

† Table I, Section 19.15.29.12 of the New Mexico Administrative Code (NMAC).

‡ The NMOCD Reclamation Standard applies only to the top 4' of soil in non-production areas. Section 19.15.29.13 D.(1) NMAC.

## 4.0 INITIAL SITE ASSESSMENT

On August 17 and 18, 2021, an initial site assessment was conducted by a third-party environmental contractor. During the initial site assessment, a series of test trenches (H1 through H4, RD1 through RD9, and V1) were advanced at the Site in an effort to determine the horizontal and vertical extent of impacted soil. During the advancement of the test trenches, soil samples were collected and field-screened for the presence of Volatile Organic Compounds (VOCs) utilizing olfactory/visual senses.

Based on field observations and field test data, a total of 48 delineation soil samples were submitted to a certified, commercial laboratory (henceforth, "the laboratory") for analysis of BTEX, TPH, and chloride. Based on laboratory analytical results, the horizontal extent of impacted soil was adequately defined. However, additional vertical delineation and/or excavation was required in the areas characterized by test trenches RD1, RD3, and V1.

The locations of the test trenches are depicted in the field sketch provided in Appendix B. Soil chemistry data is summarized in Table 1. Laboratory analytical reports are provided in Appendix D.

## 5.0 REMEDIATION ACTIVITIES SUMMARY

On November 29, 2021, Etech commenced remediation activities at the Site. In accordance with NMOCD regulatory guidelines, impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standards was excavated and stockpiled on-site, pending transfer to an NMOCD-permitted surface waste facility for disposal. Olfactory/visual senses and/or a Hach Quantab® chloride test kit were utilized to field-screen the horizontal extent of impacted soil and to guide the excavation. The sidewalls and floors of the excavation were advanced until field tests and field observations suggested BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards. Representative five-point composite confirmation soil samples were collected every 200 square feet from the sidewalls and floors of the excavated area to be submitted for laboratory analysis. Based on laboratory analytical results and field screens, the excavation was subdivided into two (2) sections: Main Excavation and a deeper Subexcavation at/near the point of release (Release Point Subexcavation).

On November 29, 2021, Etech advanced a test trench in the area characterized by sample point V1 in an effort to further investigate the vertical extent of impacted soil at/near the point of release. During the advancement of the test trench, soil samples were collected and field-screened utilizing olfactory/visual senses and/or a chloride test kit. Based on field observations and field test data, a delineation soil sample (Floor 1 @ 17') was submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards. The BTEX concentration was also below the laboratory method detection limit (MDL). The TPH concentration was 20.9 mg/kg, and the chloride concentration was 32.0 mg/kg. Based on these laboratory analytical results, the vertical extent of impacted soil was adequately defined in the areas characterized by sample point V1.

On November 30, 2021, Etech collected 13 confirmation soil samples (NSW #1 through NSW #4, ESW #1, SSW #1 through SSW #4, and FL #1 @ 2' through FL #4 @ 2') from the sidewalls and floor of the Main Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples. BTEX concentrations were below the laboratory MDL in each of the submitted soil samples, with the exception of sample FL #1 @ 2', which exhibited a BTEX concentration of 3.09 mg/kg. TPH concentrations ranged from less than the laboratory MDL in soil samples NSW #2 and FL #4 @ 2' to 3,847 mg/kg in soil sample FL #1 @ 2'. TPH concentrations exceeded the NMOCD Closure Criterion and/or NMOCD Reclamation Standard in soil samples NSW #1, NSW #4, SSW #1, SSW #2, FL #1 @ 2', FL #2 @ 2', and FL #3 @ 2'. Chloride concentrations ranged from less than the laboratory MDL in soil samples SSW #2, FL #1 @ 2', and FL #2 @ 2' to 112 mg/kg in soil sample FL #4 @ 2'.

Based on laboratory analytical results, the excavation was further advanced in the areas characterized by soil samples NSW #1, NSW #4, SSW #1, SSW #2, FL #1 @ 2', FL #2 @ 2', and FL #3 @ 2'.

On December 2, 2021, Etech collected 11 confirmation soil samples (NSW #5 through NSW #7, ESW #2, SSW #5, SSW #6, WSW #1, and FL #5 @ 4' through FL #8 @ 2') from the sidewalls and floor of the Main Excavation and eight (8) confirmation soil samples (RPNSW #1, RPNSW #2, RPESW #1, RPSSW #1, RPSSW @ 4', RPSSW #2, RPWSW #1, and RP #1 @ 10') from the sidewalls and floor of the Release Point Subexcavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX concentrations were below the laboratory MDL in a majority of the submitted soil samples, with the exceptions of samples RPNSW #1, RPSSW #1, RPSSW #2, and RP #1 @ 10', which exhibited BTEX concentrations ranging from 18.8 mg/kg (RP #1 @ 10') to 91.2 mg/kg (RPSSW #2). BTEX concentrations exceeded the NMOCD Closure Criterion in soil samples RPNSW #1, RPSSW #1, and RPSSW #2. TPH concentrations ranged from less than the laboratory MDL in soil samples NSW #7, WSW #1, FL #5 @ 4', RPNSW #2, RPESW #1, RPSSW @ 4', and RPWSW #1 to 11,980 mg/kg in soil sample RPSSW #2. TPH concentrations exceeded the NMOCD Closure Criterion and/or NMOCD Reclamation Standard in soil samples NSW #5, NSW #6, ESW #2, SSW #5, FL #8 @ 2', RPNSW #1, RPSSW #1, RPSSW #2, and RP #1 @ 10'. Chloride concentrations ranged from less than the laboratory MDL in soil sample FL #5 @ 4' to 3,600 mg/kg in soil sample RPSSW #2. Chloride concentrations exceeded the NMOCD Reclamation Standard in soil samples FL #8 @ 2', RPESW #1, RPSSW #1, and RPSSW #2.

Based on laboratory analytical results, the excavation was further advanced in the areas characterized by soil samples NSW #5, NSW #6, ESW #2, SSW #5, FL #8 @ 2', RPNSW #1, RPSSW #1, RPSSW #2, and RP #1 @ 10'.

On December 3, 2021, Etech collected nine (9) confirmation soil samples (NSW B #1, NSW B #2, SSW B #1, SSW B #2, SSW #7, FL #1 @ 3', FL #2 @ 3', FL #3 @ 3', and FL #9 @ 2') from the sidewalls and floor of the Main Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX concentrations were below the NMOCD Closure Criterion, NMOCD Reclamation Standard, and laboratory MDL in each of the submitted soil samples. TPH concentrations ranged from less than the laboratory MDL in soil samples NSW B #1, SSW B #1, SSW B #2, FL #1 @ 3', FL #2 @ 3', and FL #3 @ 3' to 2,343 mg/kg in soil sample SSW #7. TPH concentrations exceeded the NMOCD Closure Criterion and/or NMOCD Reclamation Standard in soil samples NSW B #2, SSW #7, and FL #9 @ 2'. Chloride concentrations ranged from less than the laboratory MDL in soil sample SSW B #2 to 720 mg/kg in soil sample FL #9 @ 2', which exceeded the NMOCD Reclamation Standard.

Based on laboratory analytical results, the excavation was further advanced in the areas characterized by soil samples NSW B #2, SSW #7, and FL #9 @ 2'.

On December 9, 2021, Etech collected nine (9) confirmation soil samples (NSW #2 C, NSW #4 B, NSW #5 B, NSW #6 B, ESW #2 B, SSW #5 B, SSW #7 B, FL #8 @ 4', and FL #9 @ 4') from the sidewalls and floor of the Main Excavation and three (3) confirmation soil samples (RP SSW #1 B, RP SSW #2 B, and RP FL #2 @ 21') from the sidewalls and floor of the Release Point Subexcavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and/or chloride. Laboratory analytical results indicated BTEX and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples. BTEX concentrations were also below the laboratory MDL. TPH concentrations were less than the laboratory MDL in a majority of the submitted soil samples, with the exceptions of soil samples RP SSW #2 B and RP FL #2 @ 21', which exhibited concentrations of 20.5 mg/kg and 8,680 mg/kg, respectively. The TPH concentration in soil sample RP FL #2 @ 21' exceeded the NMOCD Closure Criterion. Chloride concentrations ranged from below the laboratory MDL in soil sample RP SSW #1 B to 336 mg/kg in soil sample RP FL #2 @ 21'.

In mid-December 2021, remediation activities were temporarily suspended pending removal of the 16-NM-R001-1351 pipeline.

On November 2, 2022, Etech resumed remediation activities at the Site. Based on laboratory analytical results, the excavation was further advanced in the areas characterized by soil samples RPNSW #1 and RP FL #2 @ 21'.

On November 3, 2022, Etech collected two (2) confirmation soil samples (RPFL #2 NORTH and RPFL #2 SOUTH) from the floor of the Release Point Subexcavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria in each of the submitted soil samples. BTEX concentrations were also below the laboratory MDL. TPH concentrations were 191 mg/kg in soil sample RPFL #2 NORTH and 246 mg/kg in soil sample RPFL #2 SOUTH. Chloride concentrations were 848 mg/kg in soil sample RPFL #2 NORTH and 176 mg/kg in soil sample RPFL #2 SOUTH.

On November 7, 2022, Etech collected two (2) soil samples (RP NSW @ 21-30 and RP SSW @ 21-30) from the sidewalls of the Release Point Subexcavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX and TPH concentrations exceeded the applicable NMOCD Closure Criteria in each of the submitted soil samples, while chloride concentrations were below the NMOCD Closure Criterion. BTEX concentrations were 101 mg/kg in soil sample RP NSW @ 21-30 and 112 mg/kg in soil sample RP SSW @ 21-30. TPH concentrations were 9,708 mg/kg in soil sample RP NSW @ 21-30 and 9,532 mg/kg in soil sample RP SSW @ 21-30. Chloride concentrations were 64.0 mg/kg in soil sample RP NSW @ 21-30 and 1,870 mg/kg in soil sample RP SSW @ 21-30.

Based on laboratory analytical results, the excavation was further advanced in the areas characterized by soil samples RP NSW @ 21-30 and RP SSW @ 21-30.

On November 9, 2022, Etech collected six (6) confirmation soil samples (RP ESW #2, RP SWE #2, RP SWW #2, RP WSW #2, RP FL #3, and RP FL #4) from the sidewalls and floor of the Release Point Subexcavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory MDL. Chloride concentrations ranged from 32.0 mg/kg in soil sample RP WSW #2 to 240 mg/kg in soil sample RP FL #4.

On November 22, 2022, Etech collected two (2) confirmation soil samples (RP NSW #1 B and RP FL #5) from the sidewalls and floor of the Release Point Subexcavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory MDL. The chloride concentration was 48.0 mg/kg in each of the submitted soil samples.

The final dimensions of the Main Excavation were approximately 280 feet in length, 15 to 50 feet in width, and two (2) to four (4) feet in depth. The final dimensions of the Release Point Subexcavation were approximately 50 feet in length, 20 feet in width, and 28 to 30 feet in depth. During the course of remediation activities, Etech transported approximately 1,598 cubic yards of impacted soil to an NMOCD-permitted surface waste facility for disposal and imported an equivalent volume of locally sourced, non-impacted material to the site for use as backfill.

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

## **6.0 RESTORATION, RECLAMATION & RE-VEGETATION PLAN**

Upon receiving laboratory analytical results from confirmation soil samples, excavated areas were backfilled with locally sourced, non-impacted, "like" material placed at or near original relative positions. The affected area was contoured and compacted to achieve erosion control, stability and preservation of surface water flow to the extent practicable. Affected areas not on production pads and/or lease roads will be reseeded with an agency- and/or landowner-approved seed mixture free of noxious weeds during the first favorable growing season following closure of the Site.

## 7.0 SOIL CLOSURE REQUEST

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

Based on laboratory analytical results and field activities conducted to date, Etech recommends ETC Texas Pipeline, Ltd., provide copies of this *Remediation Summary & Soil Closure Request* to the appropriate agencies and request closure be granted to the Site.

## 8.0 LIMITATIONS

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

This report has been prepared for the benefit of ETC Texas Pipeline, Ltd. Use of the information contained in this report is prohibited without the consent of Etech and/or ETC Texas Pipeline, Ltd.



## **9.0 DISTRIBUTION**

***ETC Texas Pipeline, Ltd.***

*600 N. Marienfeld. St.*

*Suite 700*

*Midland, TX 79701*

***New Mexico Energy, Minerals and Natural Resources Department***

*Oil Conservation Division, District 1*

*1220 South St. Francis Drive*

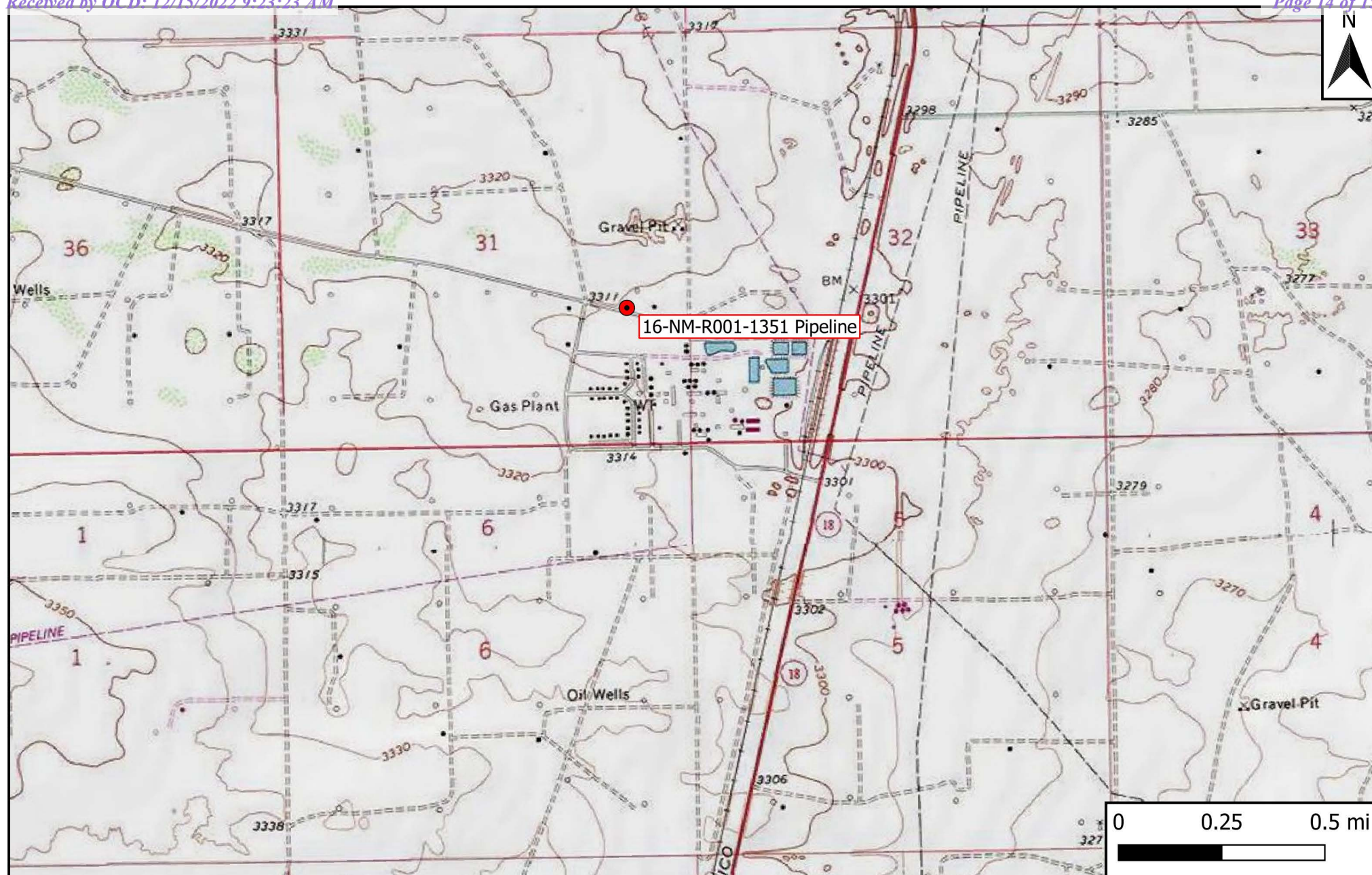
*Santa Fe, NM 87505*

*(Electronic Submission)*



# **Figure 1**

## **Topographic Map**



## Legend

- Site Location

## Figure 1

Topographic Map  
 ETC Texas Pipeline, Ltd.  
 16-NM-R001-1351 Pipeline  
 GPS: 32.25841, -103.19612  
 Lea County



Drafted: bja

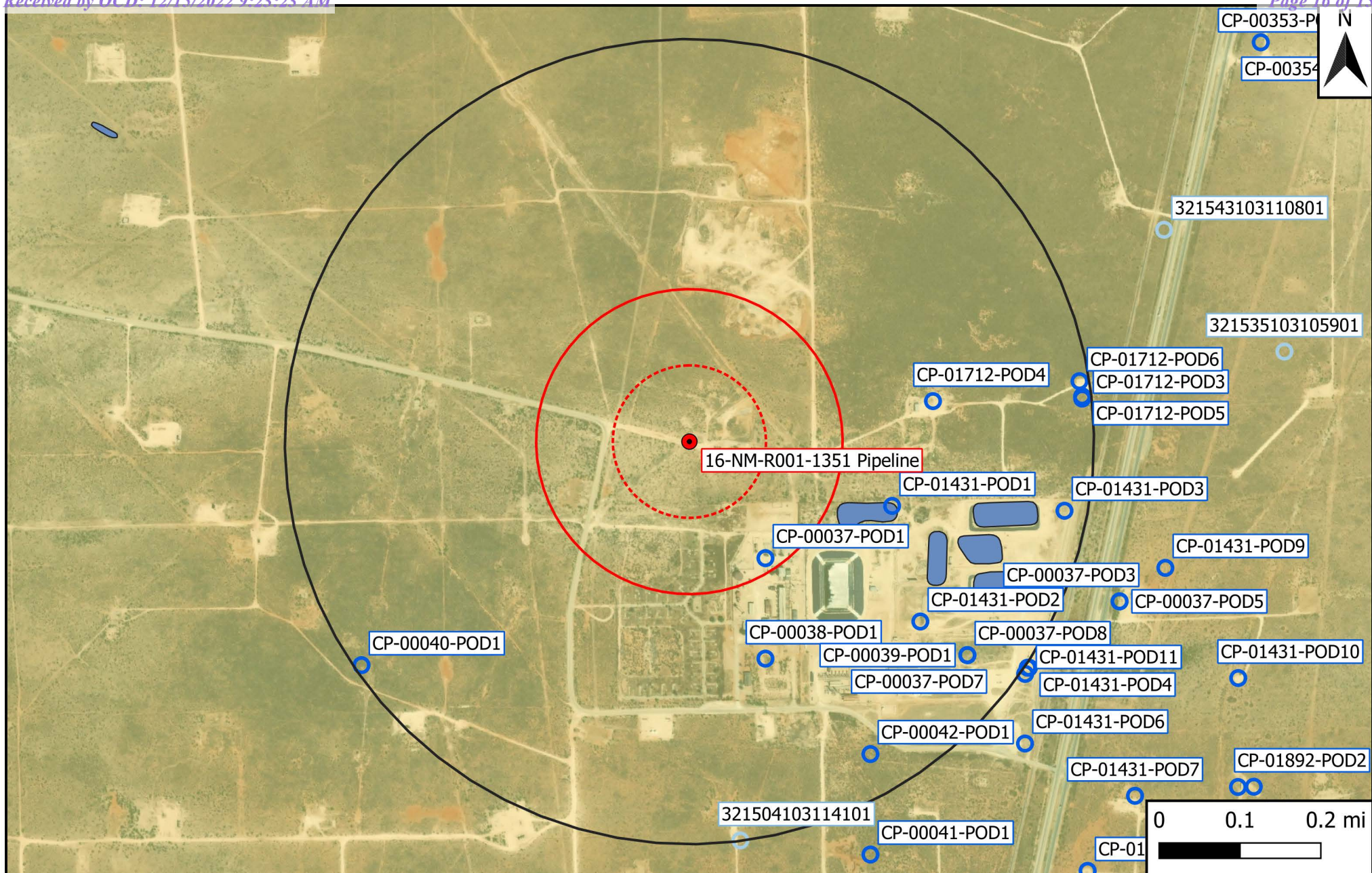
Checked: jwl

Date: 12/7/22

## **Figure 2**

### **Site Characterization Map**





## Legend

- |                              |                                 |                    |
|------------------------------|---------------------------------|--------------------|
| ● Site Location              | 1% Annual Flood Chance          | 500-Ft Radius      |
| ○ Well - NMOSE               | Emergent/Forested Wetlands      | 1,000-Ft Radius    |
| ○ Well - USGS                | Freshwater Pond/Lake            | 0.5-Mi Radius      |
| ○ Well - Exploratory/Monitor | Karst Potential (Low/Med./High) | Municipal Boundary |
| — Potash Mine Workings       | Riverine                        |                    |

Figure 2

Site Characterization Map  
ETC Texas Pipeline, Ltd.  
16-NM-R001-1351 Pipeline  
GPS: 32.25841, -103.19612  
Lea County



Drafted: bja

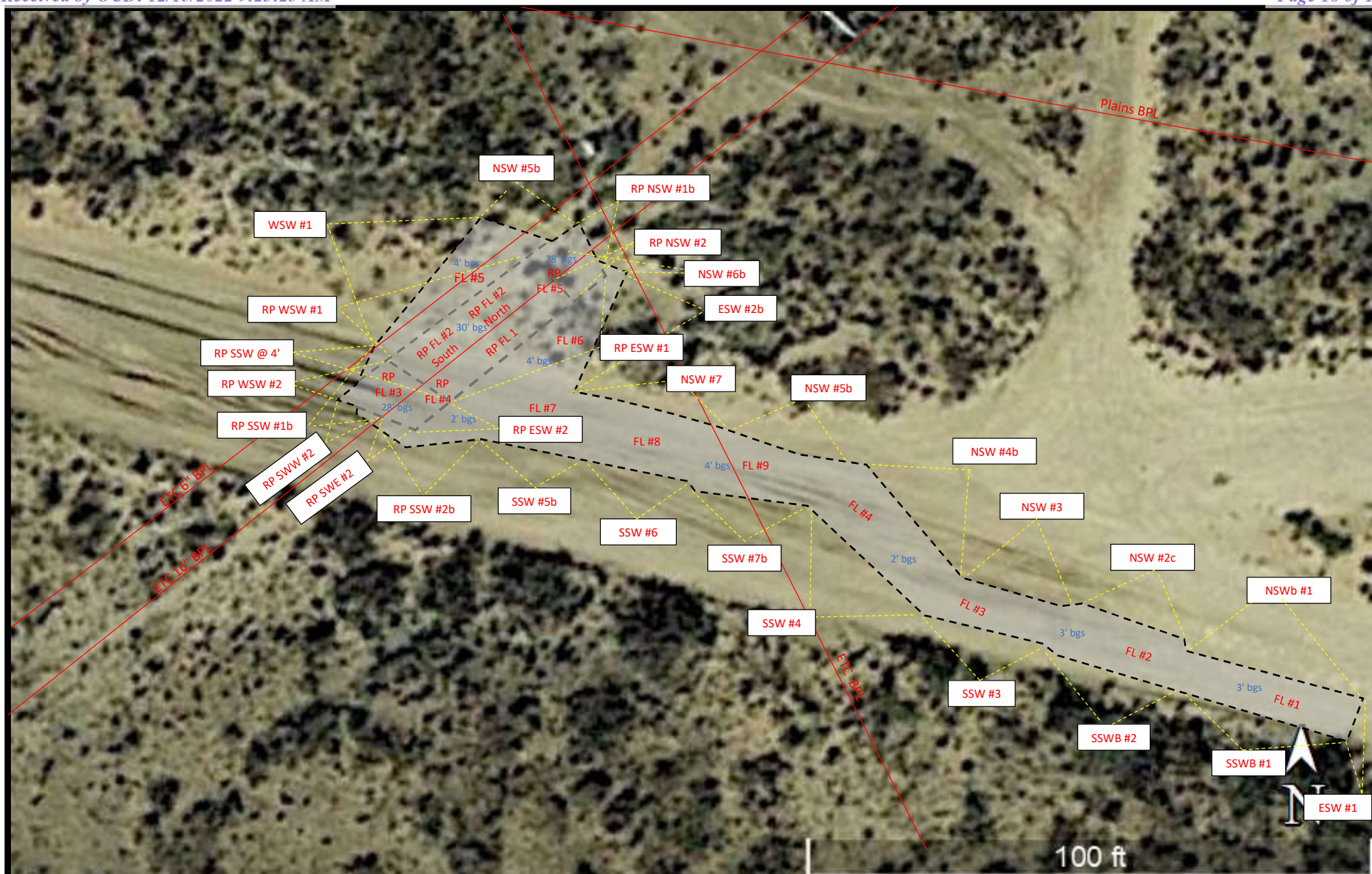
Checked: jwl

Date: 12/8/22

## **Figure 3**

### **Site & Sample Location Map**





## Legend:

- FL #2 Composite Sample Location
- Excavated Area
- Buried Pipeline

## Figure 3

Site & Sample Location Map  
 ETC Texas Pipeline, Ltd.  
 16-NM-R001-1351 Pipeline  
 GPS: 32.25841, -103.19612  
 Lea County



Drafted: jwl

Checked: bja

Date: 12/8/22

**Table 1**  
**Concentrations of BTEX, TPH & Chloride in Soil**

Table 1 Concentrations of BTEX, TPH & Chloride in Soil ETC Texas Pipeline, Ltd. 16-NM-R001-1351 Pipeline NMOCD Ref. #: nAPP2122448965											
NMOCD Closure Criteria				10	50	N/A	N/A	1,000	N/A	2,500	20,000
NMOCD Reclamation Standard				10	50	N/A	N/A	N/A	N/A	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 <sub>6</sub> -C <sub>10</sub> (mg/kg)	DRO C <sub>10</sub> -C <sub>28</sub> (mg/kg)	GRO + DRO C <sub>6</sub> -C <sub>28</sub> (mg/kg)	ORO C <sub>28</sub> -C <sub>36</sub> (mg/kg)	TPH C <sub>6</sub> -C <sub>36</sub> (mg/kg)	Chloride (mg/kg)
Delineation Samples											
H1	8/17/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
H1	8/17/2021	4	Excavated	<0.050	<0.300	<10.0	85.1	85.1	<10.0	85.1	17.0
H1.2	8/17/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	128
H1.2	8/17/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	128
H1.3	8/17/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0
H1.3	8/17/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	144
H1.4	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
H1.4	8/18/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
H1.5	8/18/2021	2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
H1.5	8/18/2021	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
H2	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
H2	8/18/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	128
H2.1	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
H2.1	8/18/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
H2.3	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
H2.3	8/18/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
H3	8/17/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	176
H3	8/17/2021	4	Excavated	<0.050	6.74	142	2,380	2,520	431	2,950	304
H3.1	8/17/2021	2	Excavated	<0.050	<0.300	<10.0	10.0	<20.0	13.7	13.7	48.0
H3.1	8/17/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
H3.2	8/17/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
H3.2	8/17/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
H4	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	89.2	89.2	<10.0	89.2	16.0
H4	8/18/2021	4	Excavated	0.0670	9.71	103	1,250	1,350	201	1,550	<16.0
H4.1	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
H4.1	8/18/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
H4.2	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
H4.2	8/18/2021	4	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
H4.3	8/18/2021	2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
H4.3	8/18/2021	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
RD1	8/18/2021	2	Excavated	<0.050	0.492	33.8	746	780	111	891	624
RD1	8/18/2021	4	In-Situ	<0.050	<0.300	<10.0	100	100	23.4	123	1,020
RD3	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	142	142	29.4	171	832
RD3	8/18/2021	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	640
RD6	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	192
RD6	8/18/2021	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	336
RD8	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
RD8	8/18/2021	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
RD9	8/18/2021	2	Excavated	<0.050	<0.300	<10.0	47.0	47.0	<10.0	47.0	<16.0
RD9	8/18/2021	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
V1	8/17/2021	2	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0

Dash (-): Sample not analyzed for that constituent.

Bold: NMOCD Closure Criteria exceedance.

Red: NMOCD Reclamation Standard exceedance.



**Table 1**  
**Concentrations of BTEX, TPH & Chloride in Soil**  
**ETC Texas Pipeline, Ltd.**  
**16-NM-R001-1351 Pipeline**  
**NMOCD Ref. #: nAPP2122448965**

NMOCD Closure Criteria				10	50	N/A	N/A	1,000	N/A	2,500	20,000
NMOCD Reclamation Standard				10	50	N/A	N/A	N/A	N/A	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 <sub>6</sub> -C <sub>10</sub> (mg/kg)	DRO C <sub>10</sub> -C <sub>28</sub> (mg/kg)	GRO + DRO C <sub>6</sub> -C <sub>28</sub> (mg/kg)	ORO C <sub>28</sub> -C <sub>36</sub> (mg/kg)	TPH C <sub>6</sub> -C <sub>36</sub> (mg/kg)	Chloride (mg/kg)
V1	8/17/2021	4	Excavated	<0.050	9.65	218	3,300	<b>3,520</b>	601	<b>4,120</b>	16.0
V1	8/17/2021	6	Excavated	0.0510	12.7	251	4,430	<b>4,680</b>	833	<b>5,510</b>	208
V1	8/17/2021	8	Excavated	0.240	39.7	741	8,550	<b>9,290</b>	1,540	<b>10,800</b>	400
V1	8/17/2021	10	Excavated	0.520	<b>73.4</b>	2,460	12,900	<b>15,400</b>	2,140	<b>17,500</b>	736
V1	8/17/2021	12	Excavated	1.92	<b>150</b>	2,940	16,100	<b>19,000</b>	3,060	<b>22,100</b>	1,320
V1	8/17/2021	14	Excavated	2.52	<b>157</b>	2,730	13,000	<b>15,700</b>	2,400	<b>18,100</b>	672
V1	8/17/2021	16	Excavated	1.56	<b>122</b>	2,260	11,600	<b>13,900</b>	2,090	<b>16,000</b>	816
FL 1 @ 17'	11/29/2021	17	In-Situ	<0.050	<0.300	<10.0	20.9	20.9	<10.0	20.9	32.0
Main Excavation Samples											
NSW #1	11/30/2021	0-3	Excavated	<0.050	<0.300	<10.0	243	243	48.4	<b>291</b>	16.0
NSW B #1	12/3/2021	0-3	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
NSW #2	11/30/2021	0-3	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
NSW B #2	12/3/2021	0-3	Excavated	<0.050	<0.300	<10.0	102	102	<10.0	<b>120</b>	80.0
NSW #2 C	12/9/2021	0-3	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	112
NSW #3	11/30/2021	0-3	In-Situ	<0.050	<0.300	<10.0	37.4	37.4	<10.0	37.4	64.0
NSW #4	11/30/2021	0-2	Excavated	<0.050	<0.300	23.7	1,850	<b>1,870</b>	412	<b>2,290</b>	64.0
NSW #4 B	12/9/2021	0-2	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	448
NSW #5	12/2/2021	0-4	Excavated	<0.050	<0.300	<10.0	969	969	240	<b>1,210</b>	112
NSW #5 B	12/9/2021	0-4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
NSW #6	12/2/2021	0-4	Excavated	<0.050	<0.300	<10.0	100	100	26.2	<b>126</b>	64.0
NSW #6 B	12/9/2021	0-4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
NSW #7	12/2/2021	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	208
ESW #1	11/30/2021	0-3	In-Situ	<0.050	<0.300	<10.0	45.6	45.6	13.0	58.6	32.0
ESW #2	12/2/2021	0-17	Excavated	<0.050	<0.300	13.2	1,100	<b>1,110</b>	244	<b>1,360</b>	208
ESW #2 B	12/9/2021	0-4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
SSW #1	11/30/2021	0-3	Excavated	<0.050	<0.300	30.7	1,650	<b>1,680</b>	376	<b>2,060</b>	32.0
SSW B #1	12/3/2021	0-3	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
SSW #2	11/30/2021	0-3	Excavated	<0.050	<0.300	17.5	1,260	<b>1,280</b>	304	<b>1,580</b>	<16.0
SSW B #2	12/3/2021	0-3	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
SSW #3	11/30/2021	0-3	In-Situ	<0.050	<0.300	<10.0	31.2	31.2	18.1	49.3	32.0
SSW #4	11/30/2021	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	11.1	11.1	48.0
SSW #5	12/2/2021	0-2	Excavated	<0.050	<0.300	<10.0	132	132	20.5	<b>153</b>	256
SSW #5 B	12/9/2021	0-2	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	288
SSW #6	12/2/2021	0-4	In-Situ	<0.050	<0.300	<10.0	12.3	12.3	<10.0	12.3	304
SSW #7	12/3/2021	0-4	Excavated	<0.050	<0.300	24.7	1,970	<b>1,990</b>	348	<b>2,340</b>	416
SSW #7 B	12/9/2021	0-4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
WSW #1	12/2/2021	0-4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
FL #1 @ 2'	11/30/2021	2	Excavated	<0.050	3.09	106	3,080	<b>3,190</b>	661	<b>3,850</b>	<16.0
FL #1 @ 3'	12/3/2021	3	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
FL #2 @ 2'	11/30/2021	2	Excavated	<0.050	<0.300	25.3	1,570	<b>1,600</b>	406	<b>2,000</b>	<16.0
FL #2 @ 3'	12/3/2021	3	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
FL #3 @ 2'	11/30/2021	2	Excavated	<0.050	<0.300	<10.0	178	178	58.0	<b>236</b>	96.0

Dash (-): Sample not analyzed for that constituent.

Bold: NMOCD Closure Criteria exceedance.

Red: NMOCD Reclamation Standard exceedance.

**Table 1**  
**Concentrations of BTEX, TPH & Chloride in Soil**  
**ETC Texas Pipeline, Ltd.**  
**16-NM-R001-1351 Pipeline**  
**NMOCD Ref. #: nAPP2122448965**

NMOCD Closure Criteria				10	50	N/A	N/A	1,000	N/A	2,500	20,000
NMOCD Reclamation Standard				10	50	N/A	N/A	N/A	N/A	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 <sub>6</sub> -C <sub>10</sub> (mg/kg)	DRO C <sub>10</sub> -C <sub>28</sub> (mg/kg)	GRO + DRO C <sub>6</sub> -C <sub>28</sub> (mg/kg)	ORO C <sub>28</sub> -C <sub>36</sub> (mg/kg)	TPH C <sub>6</sub> -C <sub>36</sub> (mg/kg)	Chloride (mg/kg)
FL #3 @ 3'	12/3/2021	3	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	160
FL #4 @ 2'	11/30/2021	2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	112
FL #5 @ 4'	12/2/2021	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
FL #6 @ 4'	12/2/2021	4	In-Situ	<0.050	<0.300	<10.0	15.2	15.2	<10.0	15.2	800
FL #7 @ 2'	12/2/2021	2	In-Situ	<0.050	<0.300	<10.0	10.3	10.3	<10.0	10.3	592
FL #8 @ 2'	12/2/2021	2	Excavated	<0.050	<0.300	<10.0	143	143	23.8	167	688
FL #8 @ 4'	12/9/2021	4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	544
FL #9 @ 2'	12/3/2021	2	Excavated	<0.050	<0.300	<10.0	698	698	89.1	787	720
FL #9 @ 4'	12/9/2021	4	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	576
Release Point Subexcavation Samples											
RPNSW #1	12/2/2021	0-21	Excavated	0.769	90.9	1,180	8,440	9,620	1,980	11,600	432
RP NSW @ 21-30	11/7/2022	21-30	Excavated	1.83	101	1,980	6,800	8,780	928	9,710	64.0
RP NSW #1 B	11/22/2022	21-30	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
RPNSW #2	12/2/2021	0-17	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	576
RPESW #1	12/2/2021	0-4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	672
RP ESW #2	11/9/2022	21-30	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	192
RP SWE #2	11/9/2022	21-30	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	160
RPSSW #1	12/2/2021	0-2	Excavated	0.258	58.3	797	7,290	8,090	2,190	10,300	1,220
RP SSW #1 B	12/9/2021	0-2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
RPSSW @ 4'	12/2/2021	0-4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
RPSSW #2	12/2/2021	0-2	Excavated	0.319	91.2	1,150	8,590	9,740	2,240	12,000	3,600
RP SSW #2 B	12/9/2021	0-2	In-Situ	<0.050	<0.300	<10.0	20.5	20.5	<10.0	20.5	304
RP SSW @ 21-30	11/7/2022	21-30	Excavated	2.22	112	1,720	6,830	8,550	982	9,530	1,870
RP SWW #2	11/9/2022	28-30	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	160
RPWSW #1	12/2/2021	0-21	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0
RP WSW #2	11/9/2022	28-30	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
RP #1 @ 10'	12/2/2021	10	Excavated	0.0570	18.8	419	3,960	4,380	1,030	5,410	256
RP FL #2 @ 21'	12/9/2021	21	Excavated	-	-	1,370	6,010	7,380	1,300	8,680	336
RPFL #2 NORTH	11/3/2022	30	In-Situ	<0.050	<0.300	<10.0	151	151	39.5	191	848
RPFL #2 SOUTH	11/3/2022	30	In-Situ	<0.050	<0.300	<10.0	195	195	50.9	246	176
RP FL #3	11/9/2022	28	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	128
RP FL #4	11/9/2022	28	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	240
RP FL #5	11/22/2022	28	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0

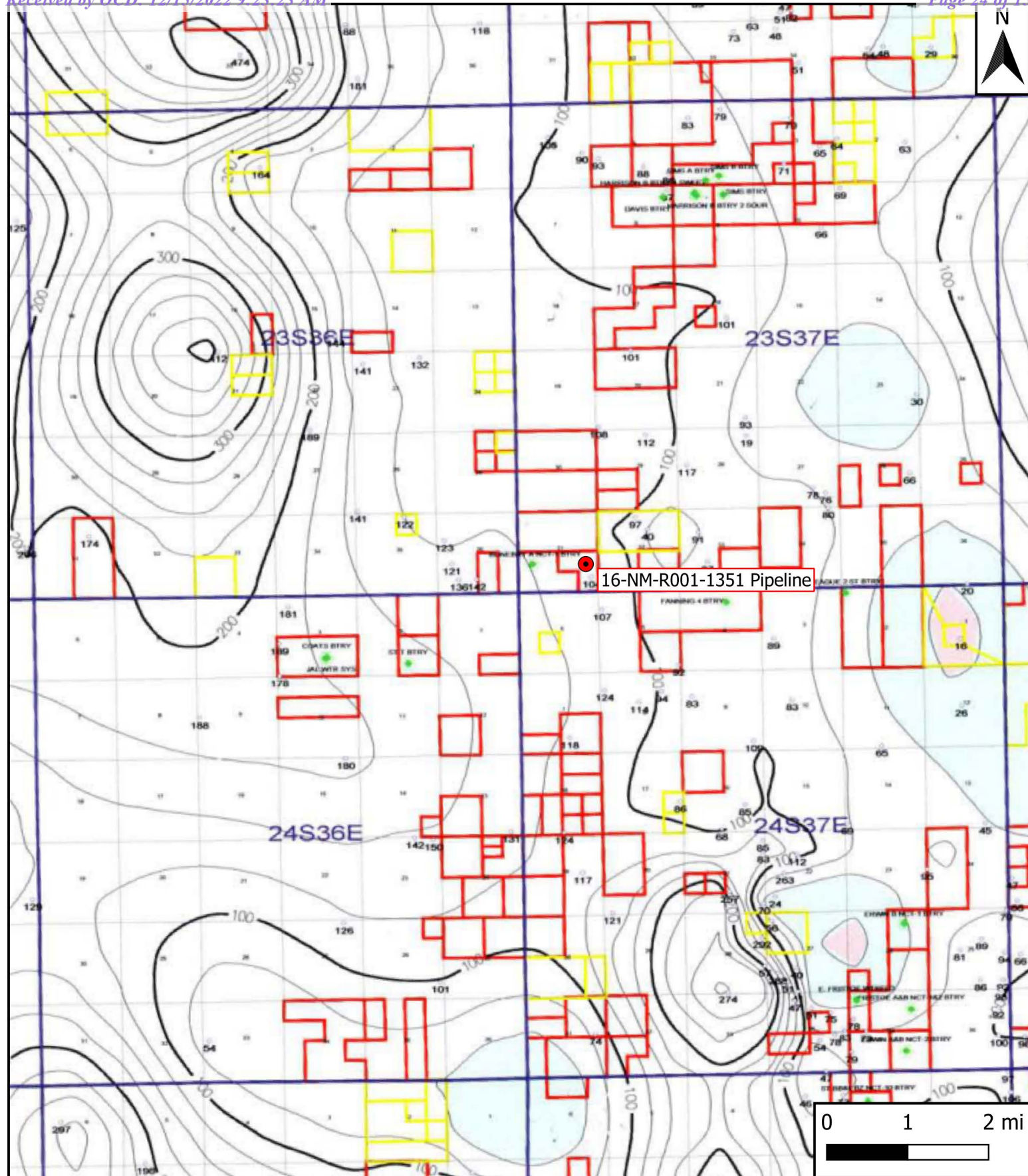
Dash (-): Sample not analyzed for that constituent.

Bold: NMOCD Closure Criteria exceedance.

Red: NMOCD Reclamation Standard exceedance.

## **Appendix A**

### **Depth to Groundwater Information**



## Legend

- Site Location

## Figure 4

Inferred Depth to Groundwater Trend Map  
 ETC Texas Pipeline, Ltd.  
 16-NM-R001-1351 Pipeline  
 GPS: 32.25841, -103.19612  
 Lea County



Drafted: bja

Checked: jwl

Date: 12/8/22





# 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 Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tw	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">CP 00037 POD1</a>		CP	LE	2	4	4	31	23S	37E	670070	3570275*	277	173	118	55
<a href="#">CP 01431 POD1</a>		CP	LE	3	1	3	32	23S	37E	670322	3570379	423	179	110	69
<a href="#">CP 00038 POD1</a>		CP	LE	4	4	4	31	23S	37E	670070	3570075*	457	180	124	56
<a href="#">CP 01712 POD4</a>		CP	LE	4	1	3	32	23S	37E	670404	3570587	491	174	108	66
<a href="#">CP 01431 POD2</a>		CP	LE	3	3	3	32	23S	37E	670378	3570148	582	176	109	67
<a href="#">CP 00037 POD7</a>		CP	LE	4	3	3	32	23S	37E	670472	3570082*	697	161		
<a href="#">CP 00037 POD8</a>		CP	LE	4	3	3	32	23S	37E	670472	3570082*	697	138		
<a href="#">CP 00039 POD1</a>		CP	LE	4	3	3	32	23S	37E	670472	3570082*	697	175	110	65
<a href="#">CP 00042 POD1</a>		CP	LE	1	1	1	05	24S	37E	670279	3569885*	718	173	111	62
<a href="#">CP 01431 POD3</a>		CP	LE	1	4	3	32	23S	37E	670665	3570369	759	180	108	72
<a href="#">CP 01712 POD6</a>		CP	LE	1	4	3	32	23S	37E	670695	3570627	785	173	106	67
<a href="#">CP 01712 POD3</a>		CP	LE	4	1	3	32	23S	37E	670700	3570592	786	128	108	20
<a href="#">CP 01712 POD5</a>		CP	LE	1	2	3	32	23S	37E	670700	3570597	786	125	106	19
<a href="#">CP 00040 POD1</a>		CP	LE	4	4	3	31	23S	37E	669266	3570062*	789	175		

Average Depth to Water: **110 feet**

Minimum Depth: **106 feet**

Maximum Depth: **124 feet**

**Record Count:** 14

**UTM NAD83 Radius Search (in meters):**

**Easting (X):** 669918.67

**Northing (Y):** 3570507

**Radius:** 804.67

\*UTM location was derived from PLSS - see Help

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.


12/8/22 6:00 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 01431 POD1	3	1	3	32	23S	37E	670322	3570379		
Driller License: 1456		Driller Company:				WHITE DRILLING COMPANY					
Driller Name: JOHN W WHITE											
Drill Start Date: 10/13/2014		Drill Finish Date:				10/13/2014		Plug Date:			
Log File Date: 11/07/2014		PCW Rcv Date:						Source:		Shallow	
Pump Type:		Pipe Discharge Size:						Estimated Yield:			
Casing Size: 4.00		Depth Well:				179 feet		Depth Water:		110 feet	
Water Bearing Stratifications:						Top	Bottom	Description			
						171	173	Sandstone/Gravel/Conglomerate			
						173	175	Sandstone/Gravel/Conglomerate			
						175	179	Shale/Mudstone/Siltstone			
Casing Perforations:						Top	Bottom				
						156	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.


12/8/22 6:27 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	Tws	Rng	X	Y
NA	CP 01712 POD4	4	1	3	32	23S	37E	670404	3570587 
<hr/>									
Driller License:	1456	Driller Company:				WHITE DRILLING COMPANY			
Driller Name:	JOHN W WHITE								
Drill Start Date:	12/03/2019	Drill Finish Date:				12/10/2019		Plug Date:	
Log File Date:	12/26/2019	PCW Rev Date:						Source:	Shallow
Pump Type:		Pipe Discharge Size:						Estimated Yield:	
Casing Size:	4.00	Depth Well:				174 feet		Depth Water:	108 feet
<hr/>									
Water Bearing Stratifications:					Top	Bottom	Description		
					53	54	Sandstone/Gravel/Conglomerate		
					54	57	Sandstone/Gravel/Conglomerate		
					57	61	Sandstone/Gravel/Conglomerate		
					61	69	Sandstone/Gravel/Conglomerate		
					69	163	Sandstone/Gravel/Conglomerate		
<hr/>									
Casing Perforations:					Top	Bottom			
					154	174			

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.


12/8/22 6:28 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	Tws	Rng	X	Y
	CP 01431 POD2	3	3	3	32	23S	37E	670378	3570148 
Driller License: 1456		Driller Company:				WHITE DRILLING COMPANY			
Driller Name: JOHN W WHITE									
Drill Start Date:	10/10/2014	Drill Finish Date:				10/13/2014		Plug Date:	
Log File Date:	11/07/2014	PCW Rcv Date:						Source:	Shallow
Pump Type:		Pipe Discharge Size:						Estimated Yield:	
Casing Size:	4.00	Depth Well:				176 feet		Depth Water:	109 feet
Water Bearing Stratifications:					Top	Bottom	Description		
					85	168	Sandstone/Gravel/Conglomerate		
					168	171	Sandstone/Gravel/Conglomerate		
					171	176	Shale/Mudstone/Siltstone		
Casing Perforations:					Top	Bottom			
					151	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.

12/8/22 6:28 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	Tws	Rng	X	Y		
	CP 01431 POD3	1	4	3	32	23S	37E	670665	3570369		
Driller License: 1456		Driller Company:				WHITE DRILLING COMPANY					
Driller Name: JOHN W WHITE											
Drill Start Date: 10/09/2014		Drill Finish Date:				10/14/2014		Plug Date:			
Log File Date: 11/07/2014		PCW Rcv Date:						Source:		Shallow	
Pump Type:		Pipe Discharge Size:						Estimated Yield:			
Casing Size: 4.00		Depth Well:				180 feet		Depth Water:		108 feet	
Water Bearing Stratifications:				Top	Bottom	Description					
				60	108	Sandstone/Gravel/Conglomerate					
				108	115	Sandstone/Gravel/Conglomerate					
				115	120	Sandstone/Gravel/Conglomerate					
				120	140	Sandstone/Gravel/Conglomerate					
				140	147	Sandstone/Gravel/Conglomerate					
				147	168	Sandstone/Gravel/Conglomerate					
				168	170	Sandstone/Gravel/Conglomerate					
				170	174	Sandstone/Gravel/Conglomerate					
Casing Perforations:				Top	Bottom						
				160	180						

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.


12/8/22 6:29 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	Tws	Rng	X	Y		
NA	CP 01712 POD6	1	4	3	32	23S	37E	670695	3570627		
Driller License: 1456		Driller Company:				WHITE DRILLING COMPANY					
Driller Name: JOHN W WHITE											
Drill Start Date:		Drill Finish Date:				Plug Date:					
Log File Date: 12/26/2019		PCW Rcv Date:				Source: Shallow					
Pump Type:		Pipe Discharge Size:				Estimated Yield:					
Casing Size: 4.00		Depth Well:				173 feet		Depth Water:		106 feet	
Water Bearing Stratifications:					Top	Bottom	Description				
					75	116	Sandstone/Gravel/Conglomerate				
					116	125	Sandstone/Gravel/Conglomerate				
Casing Perforations:					Top	Bottom					
					153	173					

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.


12/8/22 6:29 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	Tws	Rng	X	Y
NA	CP 01712 POD3	4	1	3	32	23S	37E	670700	3570592 
Driller License:	1456	Driller Company:				WHITE DRILLING COMPANY			
Driller Name:	JOHN W WHITE								
Drill Start Date:	12/04/2019	Drill Finish Date:				12/10/2019		Plug Date:	
Log File Date:	12/26/2019	PCW Rev Date:						Source:	Shallow
Pump Type:		Pipe Discharge Size:						Estimated Yield:	
Casing Size:	4.00	Depth Well:				128 feet		Depth Water:	108 feet
Water Bearing Stratifications:					Top	Bottom	Description		
					62	128	Sandstone/Gravel/Conglomerate		
Casing Perforations:					Top	Bottom			
					103	128			

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.


12/8/22 6:29 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	Tws	Rng	X	Y
NA	CP 01712 POD5	1	2	3	32	23S	37E	670700	3570597 

Driller License:	1456	Driller Company:	WHITE DRILLING COMPANY	
Driller Name:	JOHN W WHITE			
Drill Start Date:	12/06/2019	Drill Finish Date:	12/10/2019	Plug Date:
Log File Date:	12/26/2019	PCW Rev Date:		Source: Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:
Casing Size:	4.00	Depth Well:	125 feet	Depth Water: 106 feet

Water Bearing Stratifications:		Top	Bottom	Description
		116	125	Sandstone/Gravel/Conglomerate

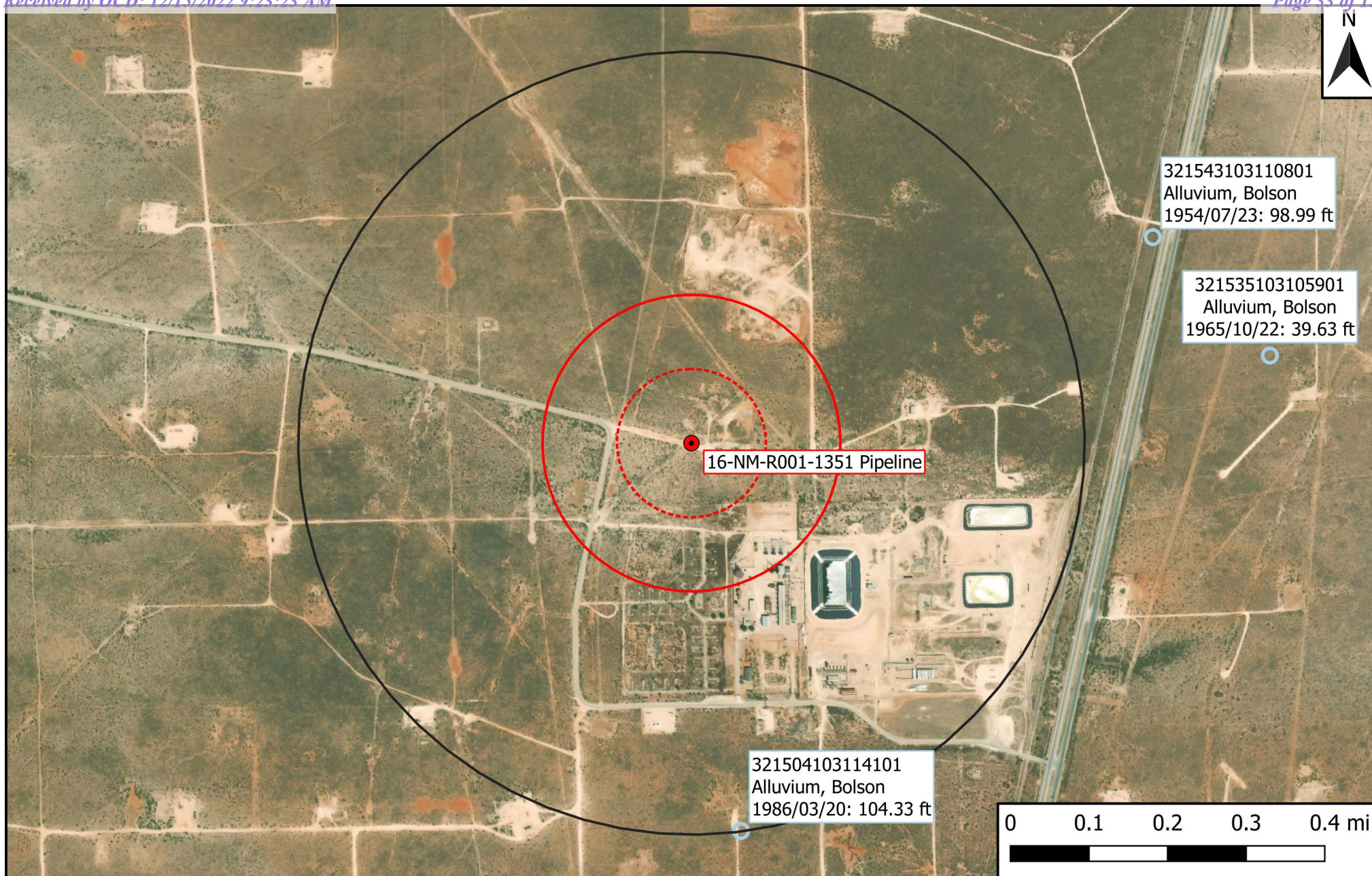
Casing Perforations:		Top	Bottom
		100	125

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.

12/8/22 6:29 PM

POINT OF DIVERSION SUMMARY





## Legend

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

## Figure 5

USGS Well Proximity Map  
Goodnight Midstream Permian, LLC  
Blueberry SWD H-Pump Discharge  
GPS: 32.459186, -103.519099  
Lea County



Drafted: bja

Checked: jwl

Date: 12/8/22





[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 =

- 321504103114101

Minimum number of levels = 1

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

### USGS 321504103114101 23S.37E.31.442321

Lea County, New Mexico

Latitude 32°15'04", Longitude 103°11'41" NAD27

Land-surface elevation 3,312 feet above NAVD88

The depth of the well is 173 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](#)

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1965-10-20			D 72019	103.56			1	Z			A
1968-02-29			D 72019	102.70			1	Z			A
1970-12-15			D 72019	100.97			1	Z			A
1976-01-20			D 72019	101.90			1	Z			A
1981-03-25			D 72019	101.50			1	Z			A
1986-03-20			D 72019	104.33			1	Z			A

Explanation		
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

[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: 2022-12-08 20:34:42 EST

0.37 0.23 nadww01



## 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 =

- 321543103110801

Minimum number of levels = 1

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

## USGS 321543103110801 23S.37E.32.12240

Lea County, New Mexico

Latitude 32°15'43", Longitude 103°11'08" NAD27

Land-surface elevation 3,303 feet above NAVD88

The depth of the well is 125 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](#)

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
1954-07-23		D	72019	98.99			1	Z			A



Explanation		
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

[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: 2022-12-08 20:35:40 EST

0.35 0.23 nadww01



National Water Information System: Web Interface

USGS Water Resources

Data Category:  
Groundwater

Geographic Area:  
United States

GO

Click forNews Bulletins

Groundwater levels for the Nation

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

Search Results -- 1 sites found

Agency code = usgs  
site\_no list =  
    • 321535103105901

Minimum number of levels = 1  
[Save file of selected sites](#) to local disk for future upload

USGS 321535103105901 23S.37E.32.213444

Lea County, New Mexico  
Latitude 32°15'35", Longitude 103°10'59" NAD27  
Land-surface elevation 3,299 feet above NAVD88  
The depth of the well is 100 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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1965-10-22		D	72019	39.63			1	Z			A

Explanation		
Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

[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](#)

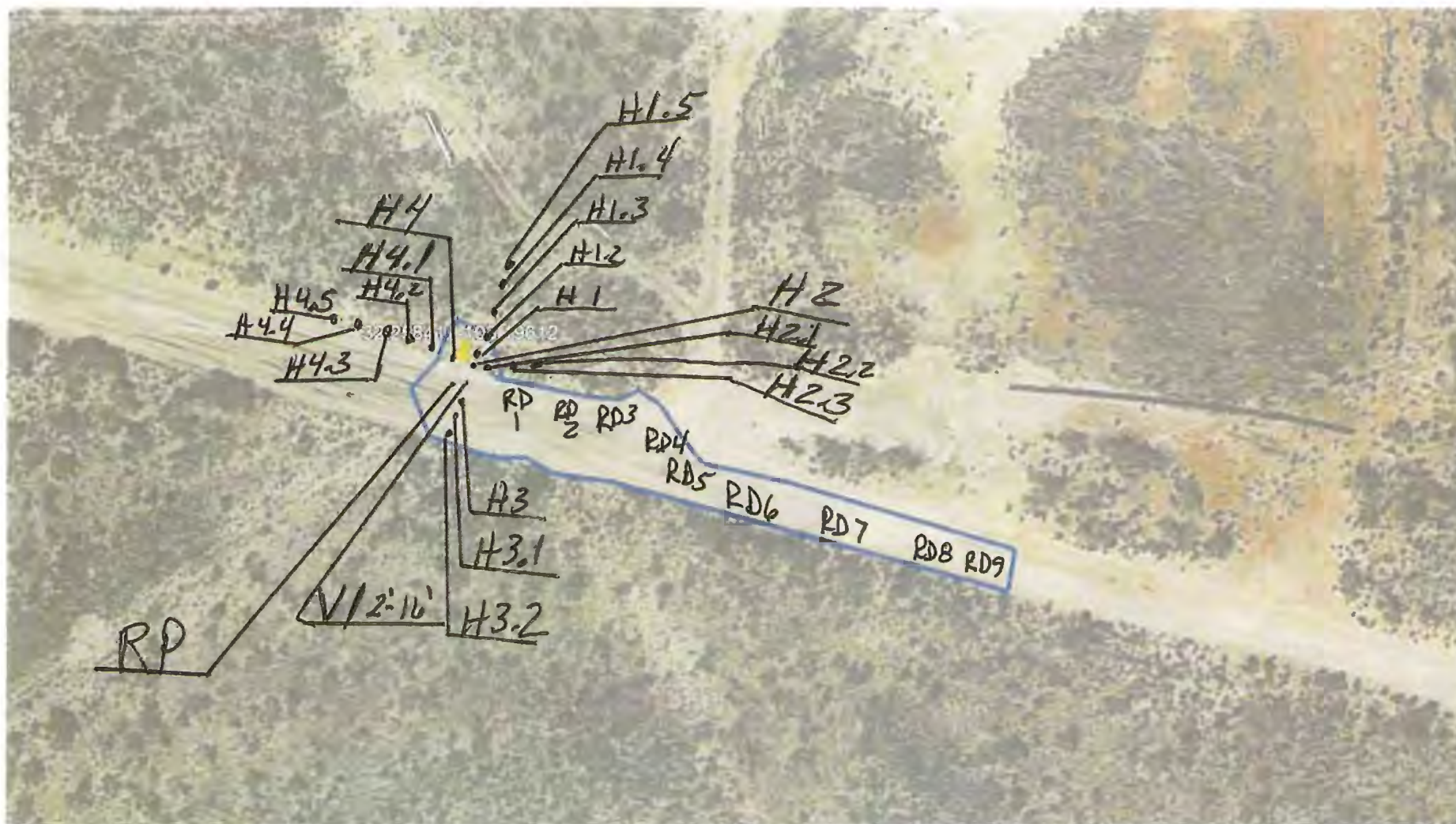
Page Last Modified: 2022-12-08 20:36:13 EST

0.31 0.26 nadww01

## **Appendix B**

### **Field Data & Soil Profile Logs**

Figure 6  
Delineation Sample Location Map







### Sample Log

Date:

8/25/21

Project: 16-NM-R001-1351 Pipeline

Project Number: 14660

Latitude: 32.25841

Longitude: -103.19612

[illegible]

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: 11/3/2022

Project: 16-NM-R001-1351 Pipeline

Project Number: 14660

Latitude: 32.25841

Longitude: -103.19612

Depth (ft. bgs)

Description


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




## **Appendix C**


### **Photographic Log**


## Photographic Log

<b>Photo Number:</b> 1	 <p>Dec 2, 2021 at 2:19:55 PM Deepwells Rd Jal NM 88252 United States</p> <p>32.258322,-103.196015</p>
<b>Photo Direction:</b> West	
<b>Photo Description:</b>  View of the excavated area.	

<b>Photo Number:</b> 2	 <p>Dec 2, 2021 at 2:19:49 PM Deepwells Rd Jal NM 88252 United States</p> <p>32.258287,-103.195903</p>
<b>Photo Direction:</b> East	
<b>Photo Description:</b>  View of the excavated area.	


## Photographic Log

<b>Photo Number:</b> 3	 <p>Dec 2, 2021 at 2:20:17 PM Deepwells Rd Jal NM 88252 United States</p> <p>32.258245,-103.195691</p>
<b>Photo Direction:</b> West-Northwest	
<b>Photo Description:</b>  View of the excavated area.	

<b>Photo Number:</b> 4	 <p>Dec 2, 2021 at 2:20:32 PM Deepwells Rd Jal NM 88252 United States</p> <p>32.258187,-103.195569</p>
<b>Photo Direction:</b> West-Northwest	
<b>Photo Description:</b>  View of the excavated area.	




## Photographic Log

<b>Photo Number:</b> 5	
<b>Photo Direction:</b> West	
<b>Photo Description:</b>  View of the excavated area.	

<b>Photo Number:</b> 6	
<b>Photo Direction:</b> West	
<b>Photo Description:</b>  View of the excavated area.	


## Photographic Log


<b>Photo Number:</b> 7	 <p>November 22, 2022 32.258466,-103.196087</p>
<b>Photo Direction:</b> South	
<b>Photo Description:</b>  View of the excavated area.	

<b>Photo Number:</b> 8	 <p>WQ564 32.25837, ±16ft -103.19625</p> <p>ft ±11ft 3306 °T NE58 ±23</p> <p>05Dec22 15:15 Ad-hoc © 05-Dec-22 15:15:45</p>
<b>Photo Direction:</b> East-Northeast	
<b>Photo Description:</b>  View of the remediated area after backfill and regrading.	





## Photographic Log

<b>Photo Number:</b> 9	
<b>Photo Direction:</b> East-Southeast	
<b>Photo Description:</b>  View of the remediated area after backfill and regrading.	

<b>Photo Number:</b> 10	
<b>Photo Direction:</b> Southwest	
<b>Photo Description:</b>  View of the remediated area after backfill and regrading.	

## Photographic Log

<b>Photo Number:</b> 11	
<b>Photo Direction:</b> Southwest	
<b>Photo Description:</b>  View of the remediated area after backfill and regrading.	

<b>Photo Number:</b> 12	
<b>Photo Direction:</b> West	
<b>Photo Description:</b>  View of the remediated area after backfill and regrading.	

## **Appendix D**

### **Laboratory Analytical Reports**



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

---

November 30, 2021

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: ETC - 16-NM-R001-1351 PIPELINE

Enclosed are the results of analyses for samples received by the laboratory on 11/29/21 15:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	11/29/2021	Sampling Date:	11/29/2021
Reported:	11/30/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: FL 1 @ 17' (H213404-01)**

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	11/30/2021	ND	1.77	88.5	2.00	0.158		
Toluene*	<0.050	0.050	11/30/2021	ND	1.84	92.2	2.00	0.941		
Ethylbenzene*	<0.050	0.050	11/30/2021	ND	1.89	94.5	2.00	1.25		
Total Xylenes*	<0.150	0.150	11/30/2021	ND	5.77	96.1	6.00	1.51		
Total BTEX	<0.300	0.300	11/30/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.8 % 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	11/30/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/30/2021	ND	205	102	200	3.81	
DRO >C10-C28*	20.9	10.0	11/30/2021	ND	188	93.8	200	2.60	
EXT DRO >C28-C36	<10.0	10.0	11/30/2021	ND					

Surrogate: 1-Chlorooctane 68.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 67.1 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

---

### Notes and Definitions

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

---

Cardinal Laboratories

\*=Accredited Analyte

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 "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



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

---

December 06, 2021

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: ETC - 16-NM-R001-1351 PIPELINE

Enclosed are the results of analyses for samples received by the laboratory on 11/30/21 16:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL # 1 @ 2'	H213420-01	Soil	30-Nov-21 00:00	30-Nov-21 16:55
FL # 2 @ 2'	H213420-02	Soil	30-Nov-21 00:00	30-Nov-21 16:55
FL # 3 @ 2'	H213420-03	Soil	30-Nov-21 00:00	30-Nov-21 16:55
FL # 4 @ 2'	H213420-04	Soil	30-Nov-21 00:00	30-Nov-21 16:55
SSW # 1	H213420-05	Soil	30-Nov-21 00:00	30-Nov-21 16:55
SSW # 2	H213420-06	Soil	30-Nov-21 00:00	30-Nov-21 16:55
SSW # 3	H213420-07	Soil	30-Nov-21 00:00	30-Nov-21 16:55
SSW # 4	H213420-08	Soil	30-Nov-21 00:00	30-Nov-21 16:55
ESW # 1	H213420-09	Soil	30-Nov-21 00:00	30-Nov-21 16:55
NSW # 1	H213420-10	Soil	30-Nov-21 00:00	30-Nov-21 16:55
NSW # 2	H213420-11	Soil	30-Nov-21 00:00	30-Nov-21 16:55
NSW # 3	H213420-12	Soil	30-Nov-21 00:00	30-Nov-21 16:55
NSW # 4	H213420-13	Soil	30-Nov-21 00:00	30-Nov-21 16:55

12/06/21 - Chloride and BTEX were added to all samples 12/02/21. This is the revised report and will replace the one sent on 12/02/21.

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**FL # 1 @ 2'**  
**H213420-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	<16.0		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
----------	-------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021****S-04**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<b>0.152</b>		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<b>0.540</b>		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<b>2.40</b>		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<b>3.09</b>		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 155 % 69.9-140 1120302 JH 03-Dec-21 8021B

**Petroleum Hydrocarbons by GC FID****S-04**

GRO C6-C10*	<b>106</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
DRO >C10-C28*	<b>3080</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
EXT DRO >C28-C36	<b>661</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	

Surrogate: 1-Chlorooctane 132 % 44.3-133 1120105 MS 01-Dec-21 8015B

Surrogate: 1-Chlorooctadecane 220 % 38.9-142 1120105 MS 01-Dec-21 8015B

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**FL # 2 @ 2'**  
**H213420-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	<16.0		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
----------	-------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
<b>Total Xylenes*</b>	<b>0.206</b>		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			118 %	69.9-140		1120302	JH	03-Dec-21	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID****S-04**

GRO C6-C10*	25.3		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
DRO >C10-C28*	1570		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
EXT DRO >C28-C36	406		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	

Surrogate: 1-Chlorooctane			109 %	44.3-133		1120105	MS	01-Dec-21	8015B	
---------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			148 %	38.9-142		1120105	MS	01-Dec-21	8015B	
-------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**FL # 3 @ 2'**  
**H213420-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>96.0</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			97.8 %		69.9-140	1120302	JH	03-Dec-21	8021B	
---------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
DRO >C10-C28*	<b>178</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
EXT DRO >C28-C36	<b>58.0</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	

Surrogate: 1-Chlorooctane			94.2 %		44.3-133	1120105	MS	01-Dec-21	8015B	
---------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			112 %		38.9-142	1120105	MS	01-Dec-21	8015B	
-------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**FL # 4 @ 2'**  
**H213420-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>112</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050	0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>		98.3 %		69.9-140	1120302	JH	03-Dec-21	8021B	
--	--	--------	--	----------	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	

<i>Surrogate: 1-Chlorooctane</i>		122 %		44.3-133	1120105	MS	01-Dec-21	8015B	
----------------------------------	--	-------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>		140 %		38.9-142	1120105	MS	01-Dec-21	8015B	
--------------------------------------	--	-------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**SSW # 1**  
**H213420-05 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>32.0</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
<b>Total Xylenes*</b>	<b>0.165</b>		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			114 %	69.9-140		1120302	JH	03-Dec-21	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID****S-04**

<b>GRO C6-C10*</b>	<b>30.7</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
<b>DRO &gt;C10-C28*</b>	<b>1650</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>376</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	

Surrogate: 1-Chlorooctane			127 %	44.3-133		1120105	MS	01-Dec-21	8015B	
---------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			179 %	38.9-142		1120105	MS	01-Dec-21	8015B	
-------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**SSW # 2**  
**H213420-06 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	<16.0		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
----------	-------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			105 %	69.9-140		1120302	JH	03-Dec-21	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	17.5		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
DRO >C10-C28*	1260		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
EXT DRO >C28-C36	304		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	

Surrogate: 1-Chlorooctane			92.8 %	44.3-133		1120105	MS	01-Dec-21	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			128 %	38.9-142		1120105	MS	01-Dec-21	8015B	
-------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**SSW # 3**  
**H213420-07 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>32.0</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			97.7 %		69.9-140	1120302	JH	03-Dec-21	8021B	
---------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
DRO >C10-C28*	<b>31.2</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	
EXT DRO >C28-C36	<b>18.1</b>		10.0	mg/kg	1	1120105	MS	01-Dec-21	8015B	

Surrogate: 1-Chlorooctane			112 %		44.3-133	1120105	MS	01-Dec-21	8015B	
---------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			125 %		38.9-142	1120105	MS	01-Dec-21	8015B	
-------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**SSW # 4**  
**H213420-08 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>48.0</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			98.3 %		69.9-140	1120302	JH	03-Dec-21	8021B	
--	--	--	--------	--	----------	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1120105	MS	02-Dec-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1120105	MS	02-Dec-21	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>11.1</b>		10.0	mg/kg	1	1120105	MS	02-Dec-21	8015B	

<i>Surrogate: 1-Chlorooctane</i>			94.5 %		44.3-133	1120105	MS	02-Dec-21	8015B	
----------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			102 %		38.9-142	1120105	MS	02-Dec-21	8015B	
--------------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**ESW # 1**  
**H213420-09 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>32.0</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			97.0 %		69.9-140	1120302	JH	03-Dec-21	8021B	
---------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1120105	MS	02-Dec-21	8015B	
<b>DRO &gt;C10-C28*</b>	<b>45.6</b>		10.0	mg/kg	1	1120105	MS	02-Dec-21	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>13.0</b>		10.0	mg/kg	1	1120105	MS	02-Dec-21	8015B	

Surrogate: 1-Chlorooctane			94.2 %		44.3-133	1120105	MS	02-Dec-21	8015B	
---------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			102 %		38.9-142	1120105	MS	02-Dec-21	8015B	
-------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**NSW # 1**  
**H213420-10 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>16.0</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			99.0 %	69.9-140		1120302	JH	03-Dec-21	8021B	
---------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1120105	MS	02-Dec-21	8015B	
<b>DRO &gt;C10-C28*</b>	<b>243</b>		10.0	mg/kg	1	1120105	MS	02-Dec-21	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>48.4</b>		10.0	mg/kg	1	1120105	MS	02-Dec-21	8015B	

Surrogate: 1-Chlorooctane			120 %	44.3-133		1120105	MS	02-Dec-21	8015B	
---------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			141 %	38.9-142		1120105	MS	02-Dec-21	8015B	
-------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**NSW # 2**  
**H213420-11 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>48.0</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			97.8 %		69.9-140	1120302	JH	03-Dec-21	8021B	
--	--	--	--------	--	----------	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1120105	MS	06-Dec-21	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	1120105	MS	06-Dec-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1120105	MS	06-Dec-21	8015B	

<i>Surrogate: 1-Chlorooctane</i>			87.4 %		44.3-133	1120105	MS	06-Dec-21	8015B	
----------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			85.6 %		38.9-142	1120105	MS	06-Dec-21	8015B	
--------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**NSW # 3**  
**H213420-12 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>64.0</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			98.6 %		69.9-140	1120302	JH	03-Dec-21	8021B	
--	--	--	--------	--	----------	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	1120105	MS	06-Dec-21	8015B	
<b>DRO &gt;C10-C28*</b>	<b>37.4</b>		10.0	mg/kg	1	1120105	MS	06-Dec-21	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	1120105	MS	06-Dec-21	8015B	

<i>Surrogate: 1-Chlorooctane</i>			91.7 %		44.3-133	1120105	MS	06-Dec-21	8015B	
----------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			92.0 %		38.9-142	1120105	MS	06-Dec-21	8015B	
--------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**NSW # 4**  
**H213420-13 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>64.0</b>		16.0	mg/kg	4	1120403	GM	04-Dec-21	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Toluene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	1120302	JH	03-Dec-21	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	1120302	JH	03-Dec-21	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			110 %	69.9-140		1120302	JH	03-Dec-21	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>23.7</b>		10.0	mg/kg	1	1120105	MS	06-Dec-21	8015B	
<b>DRO &gt;C10-C28*</b>	<b>1850</b>		10.0	mg/kg	1	1120105	MS	06-Dec-21	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>412</b>		10.0	mg/kg	1	1120105	MS	06-Dec-21	8015B	

Surrogate: 1-Chlorooctane			94.8 %	44.3-133		1120105	MS	06-Dec-21	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			97.9 %	38.9-142		1120105	MS	06-Dec-21	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1120403 - 1:4 DI Water</b>									
<b>Blank (1120403-BLK1)</b>					Prepared & Analyzed: 04-Dec-21				
Chloride	ND	16.0	mg/kg						
<b>LCS (1120403-BS1)</b>					Prepared & Analyzed: 04-Dec-21				
Chloride	400	16.0	mg/kg	400		100	80-120		
<b>LCS Dup (1120403-BSD1)</b>					Prepared & Analyzed: 04-Dec-21				
Chloride	416	16.0	mg/kg	400		104	80-120	3.92	20

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 1120302 - Volatiles****Blank (1120302-BLK1)**

Prepared &amp; Analyzed: 03-Dec-21

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		98.0	69.9-140			

**LCS (1120302-BS1)**

Prepared &amp; Analyzed: 03-Dec-21

Benzene	1.77	0.050	mg/kg	2.00		88.6	85.1-114			
Toluene	1.89	0.050	mg/kg	2.00		94.7	88.6-116			
Ethylbenzene	1.91	0.050	mg/kg	2.00		95.6	84.4-115			
m,p-Xylene	3.86	0.100	mg/kg	4.00		96.6	85.5-116			
o-Xylene	1.95	0.050	mg/kg	2.00		97.5	85.2-111			
Total Xylenes	5.81	0.150	mg/kg	6.00		96.9	86.2-113			
Surrogate: 4-Bromofluorobenzene (PID)	0.0514		mg/kg	0.0500		103	69.9-140			

**LCS Dup (1120302-BSD1)**

Prepared &amp; Analyzed: 03-Dec-21

Benzene	1.98	0.050	mg/kg	2.00		98.9	85.1-114	10.9	12.6	
Toluene	2.05	0.050	mg/kg	2.00		103	88.6-116	8.03	13.3	
Ethylbenzene	2.05	0.050	mg/kg	2.00		103	84.4-115	7.01	13.9	
m,p-Xylene	4.18	0.100	mg/kg	4.00		105	85.5-116	7.95	13.6	
o-Xylene	2.11	0.050	mg/kg	2.00		105	85.2-111	7.82	14.1	
Total Xylenes	6.29	0.150	mg/kg	6.00		105	86.2-113	7.91	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0505		mg/kg	0.0500		101	69.9-140			

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
06-Dec-21 15:06

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch 1120105 - General Prep - Organics****Blank (1120105-BLK1)**

Prepared &amp; Analyzed: 01-Dec-21

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	53.7		mg/kg	50.0		107	44.3-133			
Surrogate: 1-Chlorooctadecane	59.4		mg/kg	50.0		119	38.9-142			

**LCS (1120105-BS1)**

Prepared &amp; Analyzed: 01-Dec-21

GRO C6-C10	220	10.0	mg/kg	200		110	83.4-129			
DRO >C10-C28	232	10.0	mg/kg	200		116	79.3-136			
Total TPH C6-C28	451	10.0	mg/kg	400		113	85.3-130			
Surrogate: 1-Chlorooctane	49.4		mg/kg	50.0		98.8	44.3-133			
Surrogate: 1-Chlorooctadecane	52.3		mg/kg	50.0		105	38.9-142			

**LCS Dup (1120105-BS1)**

Prepared &amp; Analyzed: 01-Dec-21

GRO C6-C10	223	10.0	mg/kg	200		111	83.4-129	1.52	12.6	
DRO >C10-C28	240	10.0	mg/kg	200		120	79.3-136	3.37	12.1	
Total TPH C6-C28	463	10.0	mg/kg	400		116	85.3-130	2.47	11.6	
Surrogate: 1-Chlorooctane	51.7		mg/kg	50.0		103	44.3-133			
Surrogate: 1-Chlorooctadecane	58.9		mg/kg	50.0		118	38.9-142			

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager





---

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

---

### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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 or 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 damage 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 "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



# **CARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

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

## **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Page 20 of 21

Company Name: Etech Environmental & Safety Solutions, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																													
Project Manager: Joel Lowry				P.O. #:				<div style="display: flex; justify-content: space-around;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chloride added 12/2</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH (8015M) added 12/2</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX (8021B) added 12/2</div> </div>																													
Address: P.O. Box 301				Company: ETC TX Pipeline																																	
City: Lovington		State: NM		Zip: 88260		Attn:																															
Phone #: (575) 396-2378		Fax #: (575) 396-1429		Address:		City:																															
Project #:		Project Owner: Dean Erickson		State:		Zip:																															
Project Name: 16-NM-Rool-1351-Pipeline		Project Location:		Phone #:		Fax #:																															
Sampler Name: Aaron Rios																																					
FOR LAB USE ONLY																																					
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX		PRESERV.		SAMPLING																									
				GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME													
H213420																																					
1 FL #1@2'				X				X								X		11-30-21								X											
2 FL #2@2'				X				X								X		11-30-21								X											
3 FL #3@2'				X				X								X		11-30-21								X											
4 FL #4@2'				X				X								X		11-30-21								X											
5 SSW #1				X				X								X		11-30-21								X											
6 SSW #2				X				X								X		11-30-21								X											
7 SSW #3				X				X								X		11-30-21								X											
8 SSW #4				X				X								X		11-30-21								X											
9 CSW #1				X				X								X		11-30-21								X											
10 NSW #1				X				X								X		11-30-21								X											
<p>PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.</p>																																					
Relinquished By: Aaron Rios				Date: 11-30-21				Received By: [Signature]				Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Phone #:																					
				Time: 1655								Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Fax #:																					
Relinquished By:				Date:				Received By:				REMARKS:																									
				Time:																																	
Delivered By: (Circle One)				6.5°C C-0.5°C				Sample Condition				CHECKED BY:																									
Sampler - UPS - Bus - Other:				5.9°C #113				Cool Intact				(Initials)																									
								<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				Y.O.																									

FORM-006  
Revision 1.0

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





## • CARDINAL LABORATORIES

**101 East Marland, Hobbs, NM 88240**

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

---

December 08, 2021

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: ETC - 16-NM-R001-1351 PIPELINE

Enclosed are the results of analyses for samples received by the laboratory on 12/02/21 16:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: FL # 5 @ 4' (H213469-01)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEX	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/05/2021	ND	224	112	200	4.50	
DRO >C10-C28*	<10.0	10.0	12/05/2021	ND	218	109	200	5.51	
EXT DRO >C28-C36	<10.0	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 119 % 44.3-133

Surrogate: 1-Chlorooctadecane 132 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: FL # 6 @ 4' (H213469-02)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEX	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.4 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	800	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/05/2021	ND	224	112	200	4.50		
DRO >C10-C28*	15.2	10.0	12/05/2021	ND	218	109	200	5.51		
EXT DRO >C28-C36	<10.0	10.0	12/05/2021	ND						

Surrogate: 1-Chlorooctane 118 % 44.3-133

Surrogate: 1-Chlorooctadecane 122 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: FL # 7 @ 2' (H213469-03)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEX	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.2 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	592	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/05/2021	ND	224	112	200	4.50	
DRO >C10-C28*	10.3	10.0	12/05/2021	ND	218	109	200	5.51	
EXT DRO >C28-C36	<10.0	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 123 % 44.3-133

Surrogate: 1-Chlorooctadecane 124 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: FL # 8 @ 2' (H213469-04)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEX	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	688	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/05/2021	ND	224	112	200	4.50	
DRO >C10-C28*	143	10.0	12/05/2021	ND	218	109	200	5.51	
EXT DRO >C28-C36	23.8	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 124 % 44.3-133

Surrogate: 1-Chlorooctadecane 127 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: NSW # 5 (H213469-05)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61	GC-NC	
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEX	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	12/06/2021	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/05/2021	ND	224	112	200	4.50	
DRO >C10-C28*	969	10.0	12/05/2021	ND	218	109	200	5.51	
EXT DRO >C28-C36	240	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 129 % 44.3-133

Surrogate: 1-Chlorooctadecane 171 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: NSW # 6 (H213469-06)**

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	12/06/2021	ND	2.14	107	2.00	2.53	
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22	
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61	
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10	
Total BTEX	<0.300	0.300	12/06/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.5 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/05/2021	ND	224	112	200	4.50	
DRO >C10-C28*	100	10.0	12/05/2021	ND	218	109	200	5.51	
EXT DRO >C28-C36	26.2	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 111 % 44.3-133

Surrogate: 1-Chlorooctadecane 116 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: WSW # 1 (H213469-07)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEX	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/05/2021	ND	224	112	200	4.50	
DRO >C10-C28*	<10.0	10.0	12/05/2021	ND	218	109	200	5.51	
EXT DRO >C28-C36	<10.0	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 110 % 44.3-133

Surrogate: 1-Chlorooctadecane 109 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: ESW # 2 (H213469-08)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEX	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: GM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	12/06/2021	ND	416	104	400	3.92		

TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	13.2	10.0	12/05/2021	ND	224	112	200	4.50		
DRO >C10-C28*	1100	10.0	12/05/2021	ND	218	109	200	5.51		
EXT DRO >C28-C36	244	10.0	12/05/2021	ND						

Surrogate: 1-Chlorooctane 112 % 44.3-133

Surrogate: 1-Chlorooctadecane 142 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RPESW # 1 (H213469-09)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEX	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	12/06/2021	ND	416	104	400	3.92	

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	12/05/2021	ND	224	112	200	4.50	
DRO >C10-C28*	<10.0	10.0	12/05/2021	ND	218	109	200	5.51	
EXT DRO >C28-C36	<10.0	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 103 % 44.3-133

Surrogate: 1-Chlorooctadecane 103 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RPNSW # 2 (H213469-10)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEX	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.7 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	576	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/05/2021	ND	224	112	200	4.50	
DRO >C10-C28*	<10.0	10.0	12/05/2021	ND	218	109	200	5.51	
EXT DRO >C28-C36	<10.0	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 106 % 44.3-133

Surrogate: 1-Chlorooctadecane 105 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RP # 1 @ 10' (H213469-11)**

BTEx 8021B		mg/kg	Analyzed By: MS/					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.057</b>	0.050	12/06/2021	ND	2.14	107	2.00	2.53	
<b>Toluene*</b>	<b>1.74</b>	0.050	12/06/2021	ND	2.06	103	2.00	2.22	
<b>Ethylbenzene*</b>	<b>4.38</b>	0.050	12/06/2021	ND	2.01	100	2.00	2.61	GC-NC1
<b>Total Xylenes*</b>	<b>12.6</b>	0.150	12/06/2021	ND	6.06	101	6.00	3.10	GC-NC1
<b>Total BTEX</b>	<b>18.8</b>	0.300	12/06/2021	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 248 % 69.9-140

Chloride, SM4500Cl-B		mg/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>256</b>	16.0	12/06/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>419</b>	10.0	12/05/2021	ND	224	112	200	4.50	
<b>DRO &gt;C10-C28*</b>	<b>3960</b>	10.0	12/05/2021	ND	218	109	200	5.51	
<b>EXT DRO &gt;C28-C36</b>	<b>1030</b>	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 163 % 44.3-133

Surrogate: 1-Chlorooctadecane 161 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RPNSW # 1 (H213469-12)**

BTEx 8021B		mg/kg		Analyzed By: MS/				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.769</b>	0.200	12/06/2021	ND	2.14	107	2.00	2.53	
<b>Toluene*</b>	<b>10.1</b>	0.200	12/06/2021	ND	2.06	103	2.00	2.22	
<b>Ethylbenzene*</b>	<b>16.8</b>	0.200	12/06/2021	ND	2.01	100	2.00	2.61	GC-NC1
<b>Total Xylenes*</b>	<b>63.2</b>	0.600	12/06/2021	ND	6.06	101	6.00	3.10	GC-NC1
<b>Total BTEX</b>	<b>90.9</b>	1.20	12/06/2021	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 171 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>432</b>	16.0	12/06/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>1180</b>	10.0	12/05/2021	ND	224	112	200	4.50	
<b>DRO &gt;C10-C28*</b>	<b>8440</b>	10.0	12/05/2021	ND	218	109	200	5.51	
<b>EXT DRO &gt;C28-C36</b>	<b>1980</b>	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 232 % 44.3-133

Surrogate: 1-Chlorooctadecane 210 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RPWSW # 1 (H213469-13)**

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	12/06/2021	ND	2.14	107	2.00	2.53		
Toluene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.22		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.01	100	2.00	2.61		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.06	101	6.00	3.10		
Total BTEx	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/05/2021	ND	224	112	200	4.50	
DRO >C10-C28*	<10.0	10.0	12/05/2021	ND	218	109	200	5.51	
EXT DRO >C28-C36	<10.0	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 115 % 44.3-133

Surrogate: 1-Chlorooctadecane 115 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RPSSW # 1 (H213469-14)**

BTEx 8021B		mg/kg		Analyzed By: MS/				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.258</b>	0.200	12/06/2021	ND	2.14	107	2.00	2.53	
<b>Toluene*</b>	<b>6.21</b>	0.200	12/06/2021	ND	2.06	103	2.00	2.22	
<b>Ethylbenzene*</b>	<b>11.9</b>	0.200	12/06/2021	ND	2.01	100	2.00	2.61	GC-NC1
<b>Total Xylenes*</b>	<b>39.9</b>	0.600	12/06/2021	ND	6.06	101	6.00	3.10	GC-NC1
<b>Total BTEx</b>	<b>58.3</b>	1.20	12/06/2021	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 161 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1220</b>	16.0	12/06/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>797</b>	10.0	12/05/2021	ND	224	112	200	4.50	
<b>DRO &gt;C10-C28*</b>	<b>7290</b>	10.0	12/05/2021	ND	218	109	200	5.51	
<b>EXT DRO &gt;C28-C36</b>	<b>2190</b>	10.0	12/05/2021	ND					

Surrogate: 1-Chlorooctane 195 % 44.3-133

Surrogate: 1-Chlorooctadecane 200 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RPSSW @ 4' (H213469-15)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.62	
Toluene*	<0.050	0.050	12/06/2021	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.04	102	2.00	1.55	
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.20	103	6.00	1.39	
Total BTX	<0.300	0.300	12/06/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/06/2021	ND	207	104	200	5.74	
DRO >C10-C28*	<10.0	10.0	12/06/2021	ND	192	95.9	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	12/06/2021	ND					

Surrogate: 1-Chlorooctane 97.6 % 44.3-133

Surrogate: 1-Chlorooctadecane 96.5 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: SSW # 5 (H213469-16)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/06/2021	ND	2.06	103	2.00	2.62	
Toluene*	<0.050	0.050	12/06/2021	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.04	102	2.00	1.55	
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.20	103	6.00	1.39	
Total BTX	<0.300	0.300	12/06/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/06/2021	ND	207	104	200	5.74	
DRO >C10-C28*	132	10.0	12/06/2021	ND	192	95.9	200	11.2	
EXT DRO >C28-C36	20.5	10.0	12/06/2021	ND					

Surrogate: 1-Chlorooctane 107 % 44.3-133

Surrogate: 1-Chlorooctadecane 111 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: SSW # 6 (H213469-17)**

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	12/06/2021	ND	2.06	103	2.00	2.62	
Toluene*	<0.050	0.050	12/06/2021	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.04	102	2.00	1.55	
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.20	103	6.00	1.39	
Total BTX	<0.300	0.300	12/06/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/06/2021	ND	207	104	200	5.74	
DRO >C10-C28*	12.3	10.0	12/06/2021	ND	192	95.9	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	12/06/2021	ND					

Surrogate: 1-Chlorooctane 105 % 44.3-133

Surrogate: 1-Chlorooctadecane 106 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RPSSW # 2 (H213469-18)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.319</b>	0.200	12/06/2021	ND	2.06	103	2.00	2.62	
<b>Toluene*</b>	<b>8.51</b>	0.200	12/06/2021	ND	2.07	104	2.00	2.39	
<b>Ethylbenzene*</b>	<b>25.2</b>	0.200	12/06/2021	ND	2.04	102	2.00	1.55	GC-NC1
<b>Total Xylenes*</b>	<b>57.2</b>	0.600	12/06/2021	ND	6.20	103	6.00	1.39	GC-NC1
<b>Total BTEX</b>	<b>91.2</b>	1.20	12/06/2021	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 275 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3600</b>	16.0	12/06/2021	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>1150</b>	10.0	12/06/2021	ND	207	104	200	5.74	
<b>DRO &gt;C10-C28*</b>	<b>8590</b>	10.0	12/06/2021	ND	192	95.9	200	11.2	
<b>EXT DRO &gt;C28-C36</b>	<b>2240</b>	10.0	12/06/2021	ND					

Surrogate: 1-Chlorooctane 227 % 44.3-133

Surrogate: 1-Chlorooctadecane 213 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/02/2021	Sampling Date:	12/02/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: NSW # 7 (H213469-20)**

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	12/06/2021	ND	2.06	103	2.00	2.62		
Toluene*	<0.050	0.050	12/06/2021	ND	2.07	104	2.00	2.39		
Ethylbenzene*	<0.050	0.050	12/06/2021	ND	2.04	102	2.00	1.55		
Total Xylenes*	<0.150	0.150	12/06/2021	ND	6.20	103	6.00	1.39		
Total BTEx	<0.300	0.300	12/06/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	12/06/2021	ND	416	104	400	3.92		

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	12/06/2021	ND	207	104	200	5.74	
DRO >C10-C28*	<10.0	10.0	12/06/2021	ND	192	95.9	200	11.2	
EXT DRO >C28-C36	<10.0	10.0	12/06/2021	ND					

Surrogate: 1-Chlorooctane 101 % 44.3-133

Surrogate: 1-Chlorooctadecane 101 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager

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

---

### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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 "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



# **CARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

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

## **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: Etech Environmental & Safety Solutions, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																							
Project Manager: Joel Lowry				P.O. #:				<div style="display: flex; justify-content: space-around;"> <div>Chloride</div> <div>TPH (8015M)</div> <div>BTEX (8021B)</div> </div>																							
Address: P.O. Box 301				Company: ETC 16-NM-Pipeline																											
City: Lovington		State: NM		Zip: 88260		Attn: Dean Ericson																									
Phone #: (575) 396-2378		Fax #: (575) 396-1429		Address:		City:																									
Project #:		Project Owner:		State:		Zip:																									
Project Name: ETC 16-NM-RCO1-1351		Project Location:		Phone #:		Fax #:																									
Sampler Name: Aaron Rios																															
FOR LAB USE ONLY																															
Lab I.D.		Sample I.D.		(GIRAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER :		ACID/BASE:		ICE / COOL		OTHER :		DATE		TIME			
H213469																															
1 FL#5 @ 4'				X				X												X		12-2-21				✓		X			
2 FL#6 @ 4'				X				X												X		12-2-21				✓		X			
3 FL#7 @ 2'				X				X												X		12-2-21				✓		X			
4 FL#8 @ 2'				X				X												X		12-2-21				✓		X			
5 NSW#5				X				X												X		12-2-21				✓		X			
6 NSW#6				X				X												X		12-2-21				✓		X			
7 WSW#1				X				X												X		12-2-21				✓		X			
8 CSW#2				X				X												X		12-2-21				✓		X			
9 RPESW#1				X				X												X		12-2-21				✓		X			
10 RPNSW#2				X				X												X		12-2-21				✓		X			
<p>PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.</p>																															
Relinquished By: Aaron Rios				Date: 12-2-21				Received By: Tamara Alda Kye				Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Phone #:															
Relinquished By:				Time: 1655				Received By:				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Fax #:															
				Date:								REMARKS:																			
				Time:																											
Delivered By: (Circle One) 5.9c C-0.58				Sample Condition				CHECKED BY: (Initials)																							
Sampler - UPS - Bus - Other: 5.4c #113				Cool Intact				V.O.																							
				<input type="checkbox"/> Yes <input type="checkbox"/> No																											
				<input type="checkbox"/> Yes <input type="checkbox"/> No																											





## Page 23 of 23

FORM-006  
Revision 1.0

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





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

---

December 08, 2021

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: ETC - 16-NM-R001-1351 PIPELINE

Enclosed are the results of analyses for samples received by the laboratory on 12/03/21 15:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/03/2021	Sampling Date:	12/03/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: FL # 1 @ 3' (H213494-01)**

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	12/08/2021	ND	2.00	100	2.00	10.3	
Toluene*	<0.050	0.050	12/08/2021	ND	1.98	99.0	2.00	8.00	
Ethylbenzene*	<0.050	0.050	12/08/2021	ND	1.96	98.1	2.00	8.64	
Total Xylenes*	<0.150	0.150	12/08/2021	ND	5.96	99.4	6.00	9.16	
Total BTX	<0.300	0.300	12/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	12/07/2021	ND	400	100	400	3.92		

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	12/07/2021	ND	217	108	200	1.37	
DRO >C10-C28*	<10.0	10.0	12/07/2021	ND	200	99.9	200	1.64	
EXT DRO >C28-C36	<10.0	10.0	12/07/2021	ND					

Surrogate: 1-Chlorooctane 99.1 % 44.3-133

Surrogate: 1-Chlorooctadecane 97.1 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/03/2021	Sampling Date:	12/03/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: FL # 2 @ 3' (H213494-02)**

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	12/08/2021	ND	2.00	100	2.00	10.3	
Toluene*	<0.050	0.050	12/08/2021	ND	1.98	99.0	2.00	8.00	
Ethylbenzene*	<0.050	0.050	12/08/2021	ND	1.96	98.1	2.00	8.64	
Total Xylenes*	<0.150	0.150	12/08/2021	ND	5.96	99.4	6.00	9.16	
Total BTEx	<0.300	0.300	12/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	12/07/2021	ND	400	100	400	3.92		

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	12/07/2021	ND	219	109	200	0.395	
DRO >C10-C28*	<10.0	10.0	12/07/2021	ND	211	106	200	4.54	
EXT DRO >C28-C36	<10.0	10.0	12/07/2021	ND					

Surrogate: 1-Chlorooctane 79.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 72.6 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/03/2021	Sampling Date:	12/03/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: FL # 3 @ 3' (H213494-03)**

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	12/08/2021	ND	2.00	100	2.00	10.3	
Toluene*	<0.050	0.050	12/08/2021	ND	1.98	99.0	2.00	8.00	
Ethylbenzene*	<0.050	0.050	12/08/2021	ND	1.96	98.1	2.00	8.64	
Total Xylenes*	<0.150	0.150	12/08/2021	ND	5.96	99.4	6.00	9.16	
Total BTX	<0.300	0.300	12/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	12/07/2021	ND	400	100	400	3.92		

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	12/07/2021	ND	219	109	200	0.395	
DRO >C10-C28*	<10.0	10.0	12/07/2021	ND	211	106	200	4.54	
EXT DRO >C28-C36	<10.0	10.0	12/07/2021	ND					

Surrogate: 1-Chlorooctane 82.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.0 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/03/2021	Sampling Date:	12/03/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: NSW B # 1 (H213494-04)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/08/2021	ND	2.00	100	2.00	10.3		
Toluene*	<0.050	0.050	12/08/2021	ND	1.98	99.0	2.00	8.00		
Ethylbenzene*	<0.050	0.050	12/08/2021	ND	1.96	98.1	2.00	8.64		
Total Xylenes*	<0.150	0.150	12/08/2021	ND	5.96	99.4	6.00	9.16		
Total BTEX	<0.300	0.300	12/08/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	12/08/2021	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/07/2021	ND	219	109	200	0.395	
DRO >C10-C28*	<10.0	10.0	12/07/2021	ND	211	106	200	4.54	
EXT DRO >C28-C36	<10.0	10.0	12/07/2021	ND					

Surrogate: 1-Chlorooctane 83.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 76.4 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	12/03/2021	Sampling Date:	12/03/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: NSW B # 2 (H213494-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/08/2021	ND	2.00	100	2.00	10.3		
Toluene*	<0.050	0.050	12/08/2021	ND	1.98	99.0	2.00	8.00		
Ethylbenzene*	<0.050	0.050	12/08/2021	ND	1.96	98.1	2.00	8.64		
Total Xylenes*	<0.150	0.150	12/08/2021	ND	5.96	99.4	6.00	9.16		
Total BTEX	<0.300	0.300	12/08/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	12/08/2021	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/07/2021	ND	219	109	200	0.395	
DRO >C10-C28*	102	10.0	12/07/2021	ND	211	106	200	4.54	
EXT DRO >C28-C36	<10.0	10.0	12/07/2021	ND					

Surrogate: 1-Chlorooctane 66.7 % 44.3-133

Surrogate: 1-Chlorooctadecane 65.8 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/03/2021	Sampling Date:	12/03/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SSW B # 1 (H213494-06)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/08/2021	ND	2.00	100	2.00	10.3	
Toluene*	<0.050	0.050	12/08/2021	ND	1.98	99.0	2.00	8.00	
Ethylbenzene*	<0.050	0.050	12/08/2021	ND	1.96	98.1	2.00	8.64	
Total Xylenes*	<0.150	0.150	12/08/2021	ND	5.96	99.4	6.00	9.16	
Total BTX	<0.300	0.300	12/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	12/08/2021	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/07/2021	ND	219	109	200	0.395	
DRO >C10-C28*	<10.0	10.0	12/07/2021	ND	211	106	200	4.54	
EXT DRO >C28-C36	<10.0	10.0	12/07/2021	ND					

Surrogate: 1-Chlorooctane 83.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 78.4 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/03/2021	Sampling Date:	12/03/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SSW B # 2 (H213494-07)**

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	12/08/2021	ND	2.00	100	2.00	10.3		
Toluene*	<0.050	0.050	12/08/2021	ND	1.98	99.0	2.00	8.00		
Ethylbenzene*	<0.050	0.050	12/08/2021	ND	1.96	98.1	2.00	8.64		
Total Xylenes*	<0.150	0.150	12/08/2021	ND	5.96	99.4	6.00	9.16		
Total BTEX	<0.300	0.300	12/08/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	12/08/2021	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/07/2021	ND	219	109	200	0.395	
DRO >C10-C28*	<10.0	10.0	12/07/2021	ND	211	106	200	4.54	
EXT DRO >C28-C36	<10.0	10.0	12/07/2021	ND					

Surrogate: 1-Chlorooctane 80.8 % 44.3-133

Surrogate: 1-Chlorooctadecane 74.3 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/03/2021	Sampling Date:	12/03/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: FL # 9 @ 2' (H213494-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/08/2021	ND	2.00	100	2.00	10.3		
Toluene*	<0.050	0.050	12/08/2021	ND	1.98	99.0	2.00	8.00		
Ethylbenzene*	<0.050	0.050	12/08/2021	ND	1.96	98.1	2.00	8.64		
Total Xylenes*	<0.150	0.150	12/08/2021	ND	5.96	99.4	6.00	9.16		
Total BTEx	<0.300	0.300	12/08/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	12/08/2021	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/07/2021	ND	219	109	200	0.395	
DRO >C10-C28*	698	10.0	12/07/2021	ND	211	106	200	4.54	
EXT DRO >C28-C36	89.1	10.0	12/07/2021	ND					

Surrogate: 1-Chlorooctane 90.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 94.5 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/03/2021	Sampling Date:	12/03/2021
Reported:	12/08/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

**Sample ID: SSW # 7 (H213494-09)**

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	12/08/2021	ND	2.00	100	2.00	10.3		
Toluene*	<0.050	0.050	12/08/2021	ND	1.98	99.0	2.00	8.00		
Ethylbenzene*	<0.050	0.050	12/08/2021	ND	1.96	98.1	2.00	8.64		
Total Xylenes*	<0.150	0.150	12/08/2021	ND	5.96	99.4	6.00	9.16		
Total BTEX	<0.300	0.300	12/08/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	12/08/2021	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	24.7	10.0	12/07/2021	ND	219	109	200	0.395	
DRO >C10-C28*	1970	10.0	12/07/2021	ND	211	106	200	4.54	
EXT DRO >C28-C36	348	10.0	12/07/2021	ND					

Surrogate: 1-Chlorooctane 96.9 % 44.3-133

Surrogate: 1-Chlorooctadecane 116 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



---

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

---

### Notes and Definitions

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

---

Cardinal Laboratories

\*=Accredited Analyte

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 "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



**• CARDINAL LABORATORIES**

**101 East Marland, Hobbs, NM 88240**

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Etech Environmental & Safety Solutions, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																																							
Project Manager: Joel Lowry				P.O. #:				<div>Chloride</div> <div>TPH (8015M)</div> <div>BTEX (8021B)</div>																																							
Address: P.O. Box 301				Company: Etc tx Pipeline																																											
City: Lovington State: NM Zip: 88260				Attn: Dean Ericson																																											
Phone #: (575) 396-2378 Fax #: (575) 396-1429				Address:																																											
Project #: Project Owner:				City:																																											
Project Name: 16-NM-Rco1-1351-Pipeline				State: Zip:																																											
Project Location:				Phone #:																																											
Sampler Name: Aaron Rios				Fax #:																																											
FOR LAB USE ONLY						MATRIX		PRESERV.		SAMPLING																																					
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME																			
H213494																																															
1		FL#1@3'				X						X								X						12-3-21				X		X		X													
2		FL#2@3'				X						X								X						12-3-21				X		X		X													
3		FL#3@3'				X						X								X						12-3-21				X		X		X													
4		NSwb#1				X						X								X						12-3-21				X		X		X													
5		NSwb#2				X						X								X						12-3-21				X		X		X													
6		SSwb#1				X						X								X						12-3-21				X		X		X													
7		SSwb#2				X						X								X						12-3-21				X		X		X													
8		FL#9@2'				X						X								X						12-3-21				X		X		X													
9		SSW#7				X						X								X						12-3-21				X		X		X													
<p>PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.</p>																																															
Relinquished By: Aaron Rios				Date: 12/3/21		Time: 13:55		Received By: Jodi Benson				Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Phone #:				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Fax #:				REMARKS:																			
Relinquished By:				Date:		Time:		Received By:				Please email results to pm@etechenv.com.																																			
Delivered By: (Circle One) 5.4				Sample Condition		CHECKED BY:																																									
Sampler - UPS - Bus - Other: - .5				Cool Intact		(Initials)																																									
#113				<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No																																									



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

December 10, 2021

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: ETC - 16-NM-R001-1351 PIPELINE

Enclosed are the results of analyses for samples received by the laboratory on 12/09/21 15:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/09/2021	Sampling Date:	12/09/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: SSW #7 B (H213562-01)**

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	12/10/2021	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					
Surrogate: 1-Chlorooctane	82.0 %	44.3-133							
Surrogate: 1-Chlorooctadecane	76.8 %	38.9-142							

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/09/2021	Sampling Date:	12/09/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RP SSW #1 B (H213562-02)**

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	12/10/2021	ND	2.01	100	2.00	1.87		
Toluene*	<0.050	0.050	12/10/2021	ND	1.98	99.1	2.00	0.397		
Ethylbenzene*	<0.050	0.050	12/10/2021	ND	1.96	98.1	2.00	0.113		
Total Xylenes*	<0.150	0.150	12/10/2021	ND	5.94	99.0	6.00	1.12		
Total BTEx	<0.300	0.300	12/10/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 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	<16.0	16.0	12/10/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					

Surrogate: 1-Chlorooctane 78.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 75.3 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/09/2021  
 Reported: 12/10/2021  
 Project Name: ETC - 16-NM-R001-1351 PIPELINE  
 Project Number: 14660  
 Project Location: LEA CO NM

Sampling Date: 12/09/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: NSW #2 C (H213562-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	12/10/2021	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					
Surrogate: 1-Chlorooctane	88.5 %	44.3-133							
Surrogate: 1-Chlorooctadecane	82.9 %	38.9-142							

**Sample ID: SSW #5 B (H213562-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	12/10/2021	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					
Surrogate: 1-Chlorooctane	90.9 %	44.3-133							
Surrogate: 1-Chlorooctadecane	85.5 %	38.9-142							

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/09/2021	Sampling Date:	12/09/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: FL #8 @ 4' (H213562-05)**

Chloride, SM4500Cl-B			mg/kg							
			Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>544</b>	16.0	12/10/2021	ND	432	108	400	0.00		
TPH 8015M			mg/kg							
			Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78		
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45		
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND						
Surrogate: 1-Chlorooctane	89.3 %	44.3-133								
Surrogate: 1-Chlorooctadecane	82.4 %	38.9-142								

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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	12/09/2021	Sampling Date:	12/09/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RP SSW # 2 B (H213562-06)**

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	12/10/2021	ND	2.01	100	2.00	1.87		
Toluene*	<0.050	0.050	12/10/2021	ND	1.98	99.1	2.00	0.397		
Ethylbenzene*	<0.050	0.050	12/10/2021	ND	1.96	98.1	2.00	0.113		
Total Xylenes*	<0.150	0.150	12/10/2021	ND	5.94	99.0	6.00	1.12		
Total BTEx	<0.300	0.300	12/10/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.4 % 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	304	16.0	12/10/2021	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	20.5	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					

Surrogate: 1-Chlorooctane 80.2 % 44.3-133

Surrogate: 1-Chlorooctadecane 76.8 % 38.9-142

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received: 12/09/2021  
 Reported: 12/10/2021  
 Project Name: ETC - 16-NM-R001-1351 PIPELINE  
 Project Number: 14660  
 Project Location: LEA CO NM

Sampling Date: 12/09/2021  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: ESW #2 B (H213562-07)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/10/2021	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					
Surrogate: 1-Chlorooctane	93.3 %	44.3-133							
Surrogate: 1-Chlorooctadecane	86.8 %	38.9-142							

**Sample ID: NSW #6 B (H213562-08)**

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	12/10/2021	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					
Surrogate: 1-Chlorooctane	89.8 %	44.3-133							
Surrogate: 1-Chlorooctadecane	84.0 %	38.9-142							

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/09/2021	Sampling Date:	12/09/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: NSW #5 B (H213562-09)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	12/10/2021	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					
Surrogate: 1-Chlorooctane	86.4 %	44.3-133							
Surrogate: 1-Chlorooctadecane	81.4 %	38.9-142							

**Sample ID: FL #9 @ 4' (H213562-10)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	12/10/2021	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					
Surrogate: 1-Chlorooctane	77.6 %	44.3-133							
Surrogate: 1-Chlorooctadecane	78.3 %	38.9-142							

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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	12/09/2021	Sampling Date:	12/09/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: NSW #4 B (H213562-11)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	12/10/2021	ND	400	100	400	3.92	
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	12/10/2021	ND	181	90.7	200	3.78	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	204	102	200	1.45	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					
Surrogate: 1-Chlorooctane	87.0 %	44.3-133							
Surrogate: 1-Chlorooctadecane	81.1 %	38.9-142							

**Sample ID: RP FL #2 @ 21' (H213562-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	12/10/2021	ND	400	100	400	3.92		
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*	1370	50.0	12/10/2021	ND	181	90.7	200	3.78		
DRO >C10-C28*	6010	50.0	12/10/2021	ND	204	102	200	1.45		
EXT DRO >C28-C36	1300	50.0	12/10/2021	ND						
Surrogate: 1-Chlorooctane	180 %	44.3-133								
Surrogate: 1-Chlorooctadecane	115 %	38.9-142								

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.

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.
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 "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



## ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

FORM-006  
Revision 1.0

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



**ARDINAL LABORATORIES**

**101 East Marland, Hobbs, NM 88240**

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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

---

November 08, 2022

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: ETC - 16-NM-R001-1351 PIPELINE

Enclosed are the results of analyses for samples received by the laboratory on 11/03/22 12:42.

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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
08-Nov-22 08:44

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
RPFL #2 SOUTH	H225196-01	Soil	03-Nov-22 00:00	03-Nov-22 12:42
RPFL #2 NORTH	H225196-02	Soil	03-Nov-22 00:00	03-Nov-22 12:42

11/08/22 - Client added BTEX and Chloride on 11/07/22 (See COC). This is the revised report and replaces the one sent on 11/04/22.

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 or 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 damage 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 "C. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
08-Nov-22 08:44

**RPFL #2 SOUTH**  
**H225196-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>176</b>		16.0	mg/kg	4	2110724	GM	07-Nov-22	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2110602	JH/	07-Nov-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2110602	JH/	07-Nov-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2110602	JH/	07-Nov-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2110602	JH/	07-Nov-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2110602	JH/	07-Nov-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140 2110602 JH/ 07-Nov-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2110326	MS	04-Nov-22	8015B	
<b>DRO &gt;C10-C28*</b>	<b>195</b>		10.0	mg/kg	1	2110326	MS	04-Nov-22	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>50.9</b>		10.0	mg/kg	1	2110326	MS	04-Nov-22	8015B	

Surrogate: 1-Chlorooctane 89.4 % 45.3-161 2110326 MS 04-Nov-22 8015B

Surrogate: 1-Chlorooctadecane 103 % 46.3-178 2110326 MS 04-Nov-22 8015B

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
08-Nov-22 08:44

**RPFL #2 NORTH****H225196-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>848</b>		16.0	mg/kg	4	2110722	GM	07-Nov-22	4500-Cl-B	QM-07
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	-------

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	2110602	JH/	07-Nov-22	8021B	
Toluene*	<0.050		0.050	mg/kg	50	2110602	JH/	07-Nov-22	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	2110602	JH/	07-Nov-22	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	2110602	JH/	07-Nov-22	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	2110602	JH/	07-Nov-22	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140 2110602 JH/ 07-Nov-22 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	2110326	MS	04-Nov-22	8015B	
<b>DRO &gt;C10-C28*</b>	<b>151</b>		10.0	mg/kg	1	2110326	MS	04-Nov-22	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>39.5</b>		10.0	mg/kg	1	2110326	MS	04-Nov-22	8015B	

Surrogate: 1-Chlorooctane 76.9 % 45.3-161 2110326 MS 04-Nov-22 8015B

Surrogate: 1-Chlorooctadecane 88.7 % 46.3-178 2110326 MS 04-Nov-22 8015B

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
08-Nov-22 08:44

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2110722 - 1:4 DI Water****Blank (2110722-BLK1)**

Prepared &amp; Analyzed: 07-Nov-22

Chloride	ND	16.0	mg/kg
----------	----	------	-------

**LCS (2110722-BS1)**

Prepared &amp; Analyzed: 07-Nov-22

Chloride	416	16.0	mg/kg	400	104	80-120
----------	-----	------	-------	-----	-----	--------

**LCS Dup (2110722-BSD1)**

Prepared &amp; Analyzed: 07-Nov-22

Chloride	448	16.0	mg/kg	400	112	80-120	7.41	20
----------	-----	------	-------	-----	-----	--------	------	----

**Batch 2110724 - 1:4 DI Water****Blank (2110724-BLK1)**

Prepared &amp; Analyzed: 07-Nov-22

Chloride	ND	16.0	mg/kg
----------	----	------	-------

**LCS (2110724-BS1)**

Prepared &amp; Analyzed: 07-Nov-22

Chloride	416	16.0	mg/kg	400	104	80-120
----------	-----	------	-------	-----	-----	--------

**LCS Dup (2110724-BSD1)**

Prepared &amp; Analyzed: 07-Nov-22

Chloride	432	16.0	mg/kg	400	108	80-120	3.77	20
----------	-----	------	-------	-----	-----	--------	------	----

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
08-Nov-22 08:44

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2110602 - Volatiles****Blank (2110602-BLK1)**

Prepared: 06-Nov-22 Analyzed: 07-Nov-22

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		98.8	69.9-140			

**LCS (2110602-BS1)**

Prepared: 06-Nov-22 Analyzed: 07-Nov-22

Benzene	2.05	0.050	mg/kg	2.00		102	83.4-122			
Toluene	2.10	0.050	mg/kg	2.00		105	84.2-126			
Ethylbenzene	2.10	0.050	mg/kg	2.00		105	84.2-121			
m,p-Xylene	4.29	0.100	mg/kg	4.00		107	89.9-126			
o-Xylene	2.08	0.050	mg/kg	2.00		104	84.3-123			
Total Xylenes	6.37	0.150	mg/kg	6.00		106	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0495		mg/kg	0.0500		99.0	69.9-140			

**LCS Dup (2110602-BSD1)**

Prepared: 06-Nov-22 Analyzed: 07-Nov-22

Benzene	2.02	0.050	mg/kg	2.00		101	83.4-122	1.61	12.6	
Toluene	2.06	0.050	mg/kg	2.00		103	84.2-126	1.78	13.3	
Ethylbenzene	2.03	0.050	mg/kg	2.00		102	84.2-121	3.11	13.9	
m,p-Xylene	4.14	0.100	mg/kg	4.00		104	89.9-126	3.54	13.6	
o-Xylene	2.01	0.050	mg/kg	2.00		101	84.3-123	3.39	14.1	
Total Xylenes	6.15	0.150	mg/kg	6.00		103	89.1-124	3.49	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0491		mg/kg	0.0500		98.2	69.9-140			

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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Etech Environmental & Safety Solutions  
2617 W MARLAND  
HOBBS NM, 88240

Project: ETC - 16-NM-R001-1351 PIPELINE  
Project Number: 14660  
Project Manager: JOEL LOWRY  
Fax To:

Reported:  
08-Nov-22 08:44

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch 2110326 - General Prep - Organics****Blank (2110326-BLK1)**

Prepared &amp; Analyzed: 03-Nov-22

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	48.9		mg/kg	50.0		97.8	45.3-161			
Surrogate: 1-Chlorooctadecane	50.1		mg/kg	50.0		100	46.3-178			

**LCS (2110326-BS1)**

Prepared &amp; Analyzed: 03-Nov-22

GRO C6-C10	183	10.0	mg/kg	200		91.4	76.8-124			
DRO >C10-C28	182	10.0	mg/kg	200		91.2	74.9-127			
Total TPH C6-C28	365	10.0	mg/kg	400		91.3	77.5-124			
Surrogate: 1-Chlorooctane	52.6		mg/kg	50.0		105	45.3-161			
Surrogate: 1-Chlorooctadecane	56.5		mg/kg	50.0		113	46.3-178			

**LCS Dup (2110326-BS1)**

Prepared &amp; Analyzed: 03-Nov-22

GRO C6-C10	187	10.0	mg/kg	200		93.5	76.8-124	2.24	17.2	
DRO >C10-C28	184	10.0	mg/kg	200		91.8	74.9-127	0.702	18.6	
Total TPH C6-C28	371	10.0	mg/kg	400		92.6	77.5-124	1.48	17.6	
Surrogate: 1-Chlorooctane	52.8		mg/kg	50.0		106	45.3-161			
Surrogate: 1-Chlorooctadecane	55.2		mg/kg	50.0		110	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 or 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 damage 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.

Celey D. Keene, Lab Director/Quality Manager

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

---

### Notes and Definitions

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

---

Cardinal Laboratories

\*=Accredited Analyte

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 or 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 damage 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 cursive script, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



## • CARDINAL LABORATORIES

**101 East Marland, Hobbs, NM 88240**

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Page 9 of 9

[illegible]

FORM-006  
Revision 1.0

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



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

---

November 08, 2022

JOEL LOWRY

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: ETC - 16-NM-R001-1351 PIPELINE

Enclosed are the results of analyses for samples received by the laboratory on 11/07/22 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

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

Received:	11/07/2022	Sampling Date:	11/07/2022
Reported:	11/08/2022	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RP SSW @ 21-30 (H225245-01)**

BTX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>2.22</b>	0.500	11/07/2022	ND	1.87	93.7	2.00	8.09	
<b>Toluene*</b>	<b>28.6</b>	0.500	11/07/2022	ND	1.91	95.3	2.00	7.42	
<b>Ethylbenzene*</b>	<b>22.3</b>	0.500	11/07/2022	ND	1.88	93.8	2.00	7.49	
<b>Total Xylenes*</b>	<b>58.9</b>	1.50	11/07/2022	ND	5.74	95.6	6.00	7.45	
<b>Total BTX</b>	<b>112</b>	3.00	11/07/2022	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1870</b>	16.0	11/08/2022	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>1720</b>	50.0	11/08/2022	ND	188	94.2	200	9.84		
<b>DRO &gt;C10-C28*</b>	<b>6830</b>	50.0	11/08/2022	ND	188	94.0	200	7.55		
<b>EXT DRO &gt;C28-C36</b>	<b>982</b>	50.0	11/08/2022	ND						

Surrogate: 1-Chlorooctane 259 % 45.3-161

Surrogate: 1-Chlorooctadecane 167 % 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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

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

Received:	11/07/2022	Sampling Date:	11/07/2022
Reported:	11/08/2022	Sampling Type:	Soil
Project Name:	ETC - 16-NM-R001-1351 PIPELINE	Sampling Condition:	Cool & Intact
Project Number:	14660	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

**Sample ID: RP NSW @ 21-30 (H225245-02)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	1.83	0.500	11/07/2022	ND	1.87	93.7	2.00	8.09		
Toluene*	24.1	0.500	11/07/2022	ND	1.91	95.3	2.00	7.42		
Ethylbenzene*	19.7	0.500	11/07/2022	ND	1.88	93.8	2.00	7.49		
Total Xylenes*	55.1	1.50	11/07/2022	ND	5.74	95.6	6.00	7.45		
Total BTEX	101	3.00	11/07/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 139 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>64.0</b>	16.0	11/08/2022	ND	416	104	400	3.77		

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*	1980	50.0	11/08/2022	ND	188	94.2	200	9.84	
DRO >C10-C28*	6800	50.0	11/08/2022	ND	188	94.0	200	7.55	
EXT DRO >C28-C36	928	50.0	11/08/2022	ND					

Surrogate: 1-Chlorooctane 280 % 45.3-161

Surrogate: 1-Chlorooctadecane 183 % 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.

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.
- 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 "C. D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager





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

---

November 10, 2022

JOEL LOWRY

ENERGY TRANSFER

P. O. BOX 1226

JAL, NM 88252

RE: 16 - NM - R001 - 1351 PIPELINE

Enclosed are the results of analyses for samples received by the laboratory on 11/09/22 15:28.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ENERGY TRANSFER  
JOEL LOWRY  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 11/09/2022  
Reported: 11/10/2022  
Project Name: 16 - NM - R001 - 1351 PIPELINE  
Project Number: ETC  
Project Location: UL / I SEC 31 T23SS - R37EE

Sampling Date: 11/09/2022  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: RP FL #3 (H225304-01)**

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	11/10/2022	ND	1.95	97.6	2.00	0.742	
Toluene*	<0.050	0.050	11/10/2022	ND	2.06	103	2.00	1.99	
Ethylbenzene*	<0.050	0.050	11/10/2022	ND	2.01	101	2.00	2.17	
Total Xylenes*	<0.150	0.150	11/10/2022	ND	6.17	103	6.00	0.776	
Total BTX	<0.300	0.300	11/10/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 90.4 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	11/10/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2022	ND	203	101	200	3.85	
DRO >C10-C28*	<10.0	10.0	11/09/2022	ND	198	99.1	200	0.119	
EXT DRO >C28-C36	<10.0	10.0	11/09/2022	ND					

Surrogate: 1-Chlorooctane 82.8 % 45.3-161

Surrogate: 1-Chlorooctadecane 94.8 % 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENERGY TRANSFER  
JOEL LOWRY  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 11/09/2022  
Reported: 11/10/2022  
Project Name: 16 - NM - R001 - 1351 PIPELINE  
Project Number: ETC  
Project Location: UL / I SEC 31 T23SS - R37EE

Sampling Date: 11/09/2022  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: RP FL #4 (H225304-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2022	ND	1.95	97.6	2.00	0.742		
Toluene*	<0.050	0.050	11/10/2022	ND	2.06	103	2.00	1.99		
Ethylbenzene*	<0.050	0.050	11/10/2022	ND	2.01	101	2.00	2.17		
Total Xylenes*	<0.150	0.150	11/10/2022	ND	6.17	103	6.00	0.776		
Total BTEx	<0.300	0.300	11/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 91.3 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	11/10/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2022	ND	203	101	200	3.85	
DRO >C10-C28*	<10.0	10.0	11/09/2022	ND	198	99.1	200	0.119	
EXT DRO >C28-C36	<10.0	10.0	11/09/2022	ND					

Surrogate: 1-Chlorooctane 79.7 % 45.3-161

Surrogate: 1-Chlorooctadecane 90.8 % 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.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

ENERGY TRANSFER  
 JOEL LOWRY  
 P. O. BOX 1226  
 JAL NM, 88252  
 Fax To:

Received: 11/09/2022  
 Reported: 11/10/2022  
 Project Name: 16 - NM - R001 - 1351 PIPELINE  
 Project Number: ETC  
 Project Location: UL / I SEC 31 T23SS - R37EE

Sampling Date: 11/09/2022  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: RP WSW #2 (H225304-03)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2022	ND	1.95	97.6	2.00	0.742		
Toluene*	<0.050	0.050	11/10/2022	ND	2.06	103	2.00	1.99		
Ethylbenzene*	<0.050	0.050	11/10/2022	ND	2.01	101	2.00	2.17		
Total Xylenes*	<0.150	0.150	11/10/2022	ND	6.17	103	6.00	0.776		
Total BTEx	<0.300	0.300	11/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 89.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/10/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2022	ND	203	101	200	3.85	
DRO >C10-C28*	<10.0	10.0	11/10/2022	ND	198	99.1	200	0.119	
EXT DRO >C28-C36	<10.0	10.0	11/10/2022	ND					

Surrogate: 1-Chlorooctane 92.5 % 45.3-161

Surrogate: 1-Chlorooctadecane 105 % 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENERGY TRANSFER  
 JOEL LOWRY  
 P. O. BOX 1226  
 JAL NM, 88252  
 Fax To:

Received: 11/09/2022  
 Reported: 11/10/2022  
 Project Name: 16 - NM - R001 - 1351 PIPELINE  
 Project Number: ETC  
 Project Location: UL / I SEC 31 T23SS - R37EE

Sampling Date: 11/09/2022  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: RP ESW #2 (H225304-04)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2022	ND	1.95	97.6	2.00	0.742	
Toluene*	<0.050	0.050	11/10/2022	ND	2.06	103	2.00	1.99	
Ethylbenzene*	<0.050	0.050	11/10/2022	ND	2.01	101	2.00	2.17	
Total Xylenes*	<0.150	0.150	11/10/2022	ND	6.17	103	6.00	0.776	
Total BTX	<0.300	0.300	11/10/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 91.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	11/10/2022	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2022	ND	203	101	200	3.85	
DRO >C10-C28*	<10.0	10.0	11/10/2022	ND	198	99.1	200	0.119	
EXT DRO >C28-C36	<10.0	10.0	11/10/2022	ND					

Surrogate: 1-Chlorooctane 84.1 % 45.3-161

Surrogate: 1-Chlorooctadecane 95.1 % 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENERGY TRANSFER  
JOEL LOWRY  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 11/09/2022  
Reported: 11/10/2022  
Project Name: 16 - NM - R001 - 1351 PIPELINE  
Project Number: ETC  
Project Location: UL / I SEC 31 T23SS - R37EE

Sampling Date: 11/09/2022  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: RP SWW #2 (H225304-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2022	ND	1.95	97.6	2.00	0.742		
Toluene*	<0.050	0.050	11/10/2022	ND	2.06	103	2.00	1.99		
Ethylbenzene*	<0.050	0.050	11/10/2022	ND	2.01	101	2.00	2.17		
Total Xylenes*	<0.150	0.150	11/10/2022	ND	6.17	103	6.00	0.776		
Total BTEx	<0.300	0.300	11/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.5 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	11/10/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2022	ND	203	101	200	3.85	
DRO >C10-C28*	<10.0	10.0	11/10/2022	ND	198	99.1	200	0.119	
EXT DRO >C28-C36	<10.0	10.0	11/10/2022	ND					

Surrogate: 1-Chlorooctane 87.4 % 45.3-161

Surrogate: 1-Chlorooctadecane 98.1 % 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENERGY TRANSFER  
JOEL LOWRY  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 11/09/2022  
Reported: 11/10/2022  
Project Name: 16 - NM - R001 - 1351 PIPELINE  
Project Number: ETC  
Project Location: UL / I SEC 31 T23SS - R37EE

Sampling Date: 11/09/2022  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: RP SWE #2 (H225304-06)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2022	ND	1.95	97.6	2.00	0.742		
Toluene*	<0.050	0.050	11/10/2022	ND	2.06	103	2.00	1.99		
Ethylbenzene*	<0.050	0.050	11/10/2022	ND	2.01	101	2.00	2.17		
Total Xylenes*	<0.150	0.150	11/10/2022	ND	6.17	103	6.00	0.776		
Total BTX	<0.300	0.300	11/10/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 90.1 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	11/10/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2022	ND	203	101	200	3.85	
DRO >C10-C28*	<10.0	10.0	11/10/2022	ND	198	99.1	200	0.119	
EXT DRO >C28-C36	<10.0	10.0	11/10/2022	ND					

Surrogate: 1-Chlorooctane 87.2 % 45.3-161

Surrogate: 1-Chlorooctadecane 97.3 % 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.

Celey D. Keene, Lab Director/Quality Manager



---

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

---

### Notes and Definitions

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

---

Cardinal Laboratories

\*=Accredited Analyte

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 cursive script, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



Page 9 of 9

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476  
FORM-006 R 2.0





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

---

November 29, 2022

JOEL LOWRY

ENERGY TRANSFER

P. O. BOX 1226

JAL, NM 88252

RE: 16 - NM - R001 - 1351 PIPELINE

Enclosed are the results of analyses for samples received by the laboratory on 11/23/22 12:04.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ENERGY TRANSFER  
JOEL LOWRY  
P. O. BOX 1226  
JAL NM, 88252  
Fax To:

Received: 11/23/2022  
Reported: 11/29/2022  
Project Name: 16 - NM - R001 - 1351 PIPELINE  
Project Number: 14660  
Project Location: UL / I SEC 31 T23SS - R37EE

Sampling Date: 11/22/2022  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: RP NSW #1 B (H225551-01)**

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	11/28/2022	ND	1.94	97.1	2.00	0.849	
Toluene*	<0.050	0.050	11/28/2022	ND	2.08	104	2.00	0.361	
Ethylbenzene*	<0.050	0.050	11/28/2022	ND	2.05	103	2.00	0.817	
Total Xylenes*	<0.150	0.150	11/28/2022	ND	6.20	103	6.00	0.650	
Total BTX	<0.300	0.300	11/28/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 87.2 % 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	11/28/2022	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	11/28/2022	ND	212	106	200	0.877	
DRO >C10-C28*	<10.0	10.0	11/28/2022	ND	197	98.5	200	0.243	
EXT DRO >C28-C36	<10.0	10.0	11/28/2022	ND					

Surrogate: 1-Chlorooctane 90.8 % 45.3-161

Surrogate: 1-Chlorooctadecane 97.3 % 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.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENERGY TRANSFER  
 JOEL LOWRY  
 P. O. BOX 1226  
 JAL NM, 88252  
 Fax To:

Received: 11/23/2022  
 Reported: 11/29/2022  
 Project Name: 16 - NM - R001 - 1351 PIPELINE  
 Project Number: 14660  
 Project Location: UL / I SEC 31 T23SS - R37EE

Sampling Date: 11/22/2022  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: RP FL #5 (H225551-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/28/2022	ND	1.94	97.1	2.00	0.849		
Toluene*	<0.050	0.050	11/28/2022	ND	2.08	104	2.00	0.361		
Ethylbenzene*	<0.050	0.050	11/28/2022	ND	2.05	103	2.00	0.817		
Total Xylenes*	<0.150	0.150	11/28/2022	ND	6.20	103	6.00	0.650		
Total BTEx	<0.300	0.300	11/28/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 85.8 % 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	48.0	16.0	11/28/2022	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	11/28/2022	ND	212	106	200	0.877	
DRO >C10-C28*	<10.0	10.0	11/28/2022	ND	197	98.5	200	0.243	
EXT DRO >C28-C36	<10.0	10.0	11/28/2022	ND					

Surrogate: 1-Chlorooctane 94.0 % 45.3-161

Surrogate: 1-Chlorooctadecane 101 % 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.

Celey D. Keene, Lab Director/Quality Manager



---

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

---

### Notes and Definitions

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

---

Cardinal Laboratories

\*=Accredited Analyte

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 "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

**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 167327

CONDITIONS

Operator: ETC Texas Pipeline, Ltd. 8111 Westchester Drive Dallas, TX 75225	OGRID: 371183
	Action Number: 167327
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	1/12/2023