

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NRM2030426190
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Endeavor Energy Resources, LP	OGRID	190595
Contact Name	Teffanie Fawks	Contact Telephone	432-262-4203
Contact email	teffanies@eeronline.com	Incident # (assigned by OCD)	
Contact mailing address	110 N. Marienfeld, Suite 200, Midland, TX 79706		

Location of Release Source

Latitude 33.622009 Longitude -103.569111
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	State 22 Water Transfer Line	Site Type	Battery
Date Release Discovered	6/7/2020	API# (if applicable)	

Unit Letter	Section	Township	Range	County
G	16	8S	33E	Chaves

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	0.2	Volume Recovered (bbls)	0.1
☒ Produced Water	Volume Released (bbls)	18.1	Volume Recovered (bbls)	7.9
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No		
☐ Condensate	Volume Released (bbls)		Volume Recovered (bbls)	
☐ Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)	
☐ Other (describe)	Volume/Weight Released (provide units)		Volume/Weight Recovered (provide units)	

Cause of Release

Busted line underground coming from a nearby water tank was transferring water to swd.

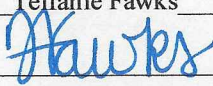
State of New Mexico
Oil Conservation Division

Incident ID	NRM2030426190
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
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: <u>Teffanie Fawks</u> Title: <u>HSE Environmental Field Tech</u> Signature: <u></u> Date: <u>10/20/20</u> email: <u>teffanies@eeronline.com</u> Telephone: <u>432-262-4203</u>
<u>OCD Only</u> Received by: <u>Cristina Eads</u> Date: <u>10/22/2020</u>

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Jamon Hohensee

Title: Sr. Environmental Specialist

Signature: _____

Date: 8/7/23 _____

email: jhohensee@eeronline.com _____

Telephone: 432-238-8808 _____

OCD Only

Received by: _____

Date: _____

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

Closure Approved by: _____ Nelson Velez _____ Date: 08/07/2023

Printed Name: _____ Nelson Velez _____

Title: _____ Environmental Specialist - Adv _____

Remediation Summary and Soil Closure Request

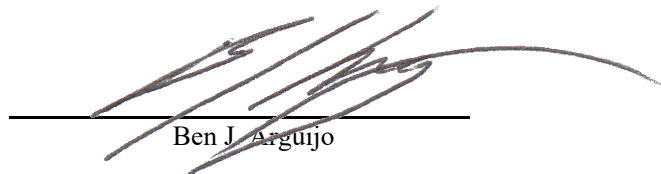
Endeavor Energy Resources, LP State 22 Water Transfer Line

Chaves County, New Mexico
Unit Letter G, Section 16, Township 8 South, Range 33 East
Latitude 33.622009 North, Longitude 103.569111 West
NMOCD Reference No. nRM2030426190

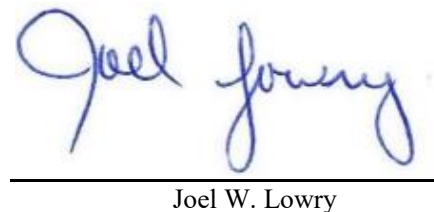
Prepared By:

Etech Environmental & Safety Solutions, Inc.

3100 Plains Highway
Lovington, New Mexico 88260



Ben J. Arguijo



Joel W. Lowry



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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 Release Site. Probable groundwater depth was determined using data generated by numeric models based on available water well data, published information, and/or well gauging data. Depth to groundwater information is provided as Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	~132 Ft	
Did the release impact groundwater or surface water?	☐ Yes	☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes	☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes	☒ No
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	☐ Yes	☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes	☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes	☒ No
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes	☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes	☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes	☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes	☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes	☒ No
Did the release impact areas not on an exploration, development, production or storage site?	☒ Yes	☐ No

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figures 1, 2, 4 & 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 for the Site is as follows:

Closure Criteria for Soil Impacted by a Release			
Probable Depth to Groundwater	Constituent	Method	Limit
~132 Ft	Chloride	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	2,500 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg

4.0 INITIAL SITE ASSESSMENT

On June 11, 2020, Etech conducted an initial site assessment. During the initial site assessment, a series of hand-augered soil bores were advanced within the release margins in an effort to determine the vertical extent of soil impacts. In addition, hand-augered soil bores were advanced at the inferred edges of the affected area in an effort to determine the horizontal extent of soil impacts. During the advancement of the hand-augered soil bores, field soil samples were collected and field-screened for the presence of Volatile Organic Compounds (VOCs) utilizing a Photoionization Detector (PID) and/or concentrations of chloride utilizing Hach Quantab® chloride titrators (henceforth, "chloride test kit"). Field data and soil profile logs are provided as Appendix B.

Based on field observations and field test data, eleven (11) delineation soil samples (SH @ Surface, SH @ 1', NH @ Surface, NH @ 1', WHA @ Surface, WHA @ 1', V1 @ 2.5' R, V2 @ 1' R, V3 @ 2' R, EHB @ Surface, and EHB @ 1') were submitted to a certified commercial laboratory for analysis of BTEX, TPH and chloride. Based on laboratory analytical results, the horizontal extent of affected soil impacted above the NMOCD Closure Criteria was adequately defined. Due to hand auger refusal, the vertical extent of affected soil was not adequately defined.

On June 24, 2020, Etech returned to the site to complete the initial site assessment. A series of test trenches were advanced within the release margins in an effort to determine the vertical extent of soil impacts. Field soil samples were collected from the test trenches and field-screened utilizing a PID and/or a chloride test kit.

Based on field observations and field test data, five (5) delineation soil samples (V1 @ 3', V1 @ 4', V2 @ 2', V3 @ 3', and V3 @ 4') were submitted to the laboratory for analysis of BTEX, TPH and chloride. Based on laboratory analytical results, soil was not affected above the NMOCD Closure Criteria and/or the NMOCD Reclamation Standard beyond 4 feet bgs in the areas characterized by sample points V1 and V3, and beyond 2 feet bgs in the area characterized by sample point V2. The vertical extent of affected soil was adequately defined.

A "Site & Sample Location Map" is provided as Figure 3. Field data and soil profile logs are provided as Appendix B. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided in Appendix C.

5.0 PROPOSED REMEDIATION PLAN

On October 22, 2020, based on laboratory analytical results, site characteristics and field observations made during the initial site assessment, Endeavor Energy Resources, LP, submitted a *Site Assessment Report and Proposed Remediation Workplan* to the NMOCD proposing the following remediation activities designed to advance the Site toward an approved closure:

- Utilizing mechanical equipment, excavate impacted soil affected above the NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in the areas characterized by sample points V1 and V3 to a depth of approximately 4 feet bgs, and V2 to a depth of approximately 2 feet bgs.
- Advance the floor and sidewalls of the excavated area until laboratory analytical results indicate impacted soil affected above the NMOCD Closure Criteria and/or the NMOCD Reclamation Standard has been removed.
- Temporarily stockpile excavated material on-site, prior to transfer to an NMOCD-approved disposal facility.
- Upon excavating impacted soil affected above the NMOCD Closure Criteria and/or the NMOCD Reclamation Standard, collect the requisite excavation confirmation soil samples.
- Upon receiving laboratory analytical results from excavation confirmation soil samples, backfill the excavated area with locally sourced, non-impacted "like" material.
- Contour the backfilled excavation to match the surrounding topography.
- Upon completion of remediation activities, prepare a Remediation Summary and Site Closure Request detailing remediation activities and the results of confirmation soil samples.

Please reference the *Site Assessment Report and Proposed Remediation Workplan* for additional details regarding site characterization and proposed remediation activities.

6.0 REMEDIATION ACTIVITIES SUMMARY

On September 16, 2020, remediation activities commenced at the Site. In accordance with the workplan, impacted soil affected above the NMOCD Closure Criteria was excavated and stockpiled on-site, pending transfer to an NMOCD-approved surface waste facility for disposal. The floor and sidewalls of the excavation were advanced until field observations and test results suggested BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

Etech collected five (5) excavation confirmation soil samples. The collected soil samples were submitted to a certified commercial 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 the NMOCD Reclamation Standard in each of the submitted soil samples.

On September 17, 2020, Etech collected three (3) excavation confirmation soil samples. The collected soil samples were submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

On September 18, 2020, Etech collected five (5) excavation confirmation soil samples. The collected soil samples were submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

On September 21, 2020, Etech collected two (2) excavation confirmation soil samples. The collected soil samples were submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

On September 25, 2020, Etech collected three (3) excavation confirmation soil samples. The collected soil samples were submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

On September 28, 2020, Etech collected four (4) excavation confirmation soil samples. The collected soil samples were submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

On September 29, 2020, Etech collected twenty-six (26) excavation confirmation soil samples. The collected soil samples were submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

A "Site & Sample Location Map" is provided as Figure 3. A soil chemistry table is provided as Table 1. Laboratory analytical reports are provided in Appendix C.

The final dimensions of the excavated area were 146 feet in length, 16 to 60 feet in width, and ranged from 2 to 4 feet in depth. During the course of remediation activities, approximately 1,000 cubic yards of impacted soil were transported to an NMOCD-approved surface waste facility for disposal.

7.0 RESTORATION, RECLAMATION AND 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/or 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-approved seed mixture free of noxious weeds during the first favorable growing season following closure of the site.

8.0 SOIL CLOSURE REQUEST

Remediation activities were conducted in accordance with the *Site Assessment Report and Proposed Remediation Workplan*. Impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was excavated and transported to an NMOCD-approved disposal facility. Laboratory analytical results from confirmation soil samples indicate concentrations of BTEX, TPH and chloride are below the NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

Based on laboratory analytical results and field activities conducted to date, Etech recommends Endeavor Energy Resources, LP, provide copies of this *Remediation Summary and Soil Closure Request* to the appropriate agencies and request closure be granted to the State 22 Water Transfer Line Site.

9.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this Remediation Summary and 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 reference 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 Endeavor Energy Resources, LP. Use of the information contained in this report is prohibited without the consent of Etech and/or Endeavor Energy Resources, LP.

10.0 DISTRIBUTION

Endeavor Energy Resources, LP

*110 N. Marienfeld St
Suite 200
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*

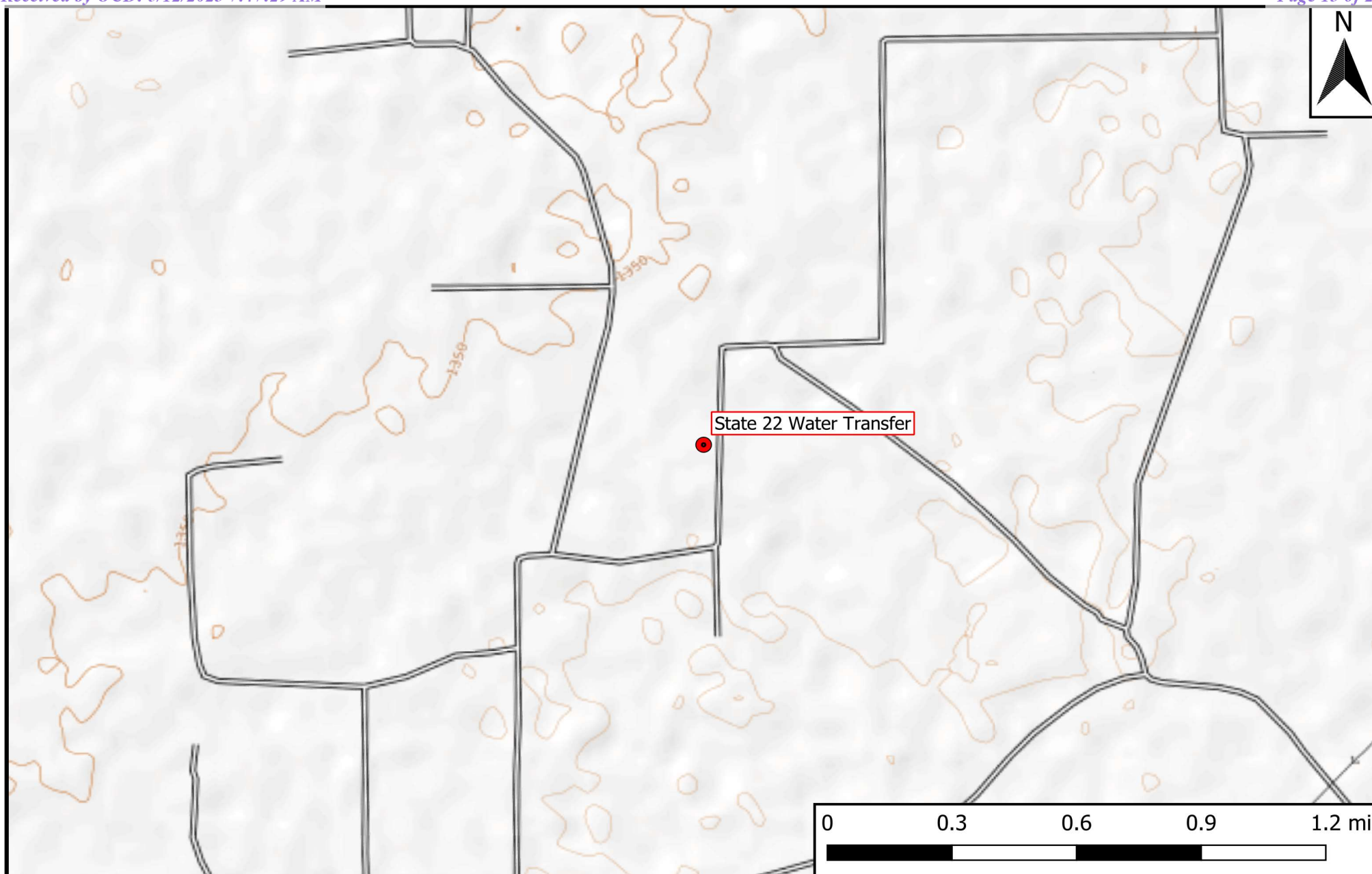
Hobbs Field Office

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

(Electronic Submission)

Figure 1

Topographic Map



Legend

- Site Location

Figure 1

Topographic Map
Endeavor Energy Resources, LP
State 22 Water Transfer Line
GPS: 33.622009, -103.569111
Chaves County



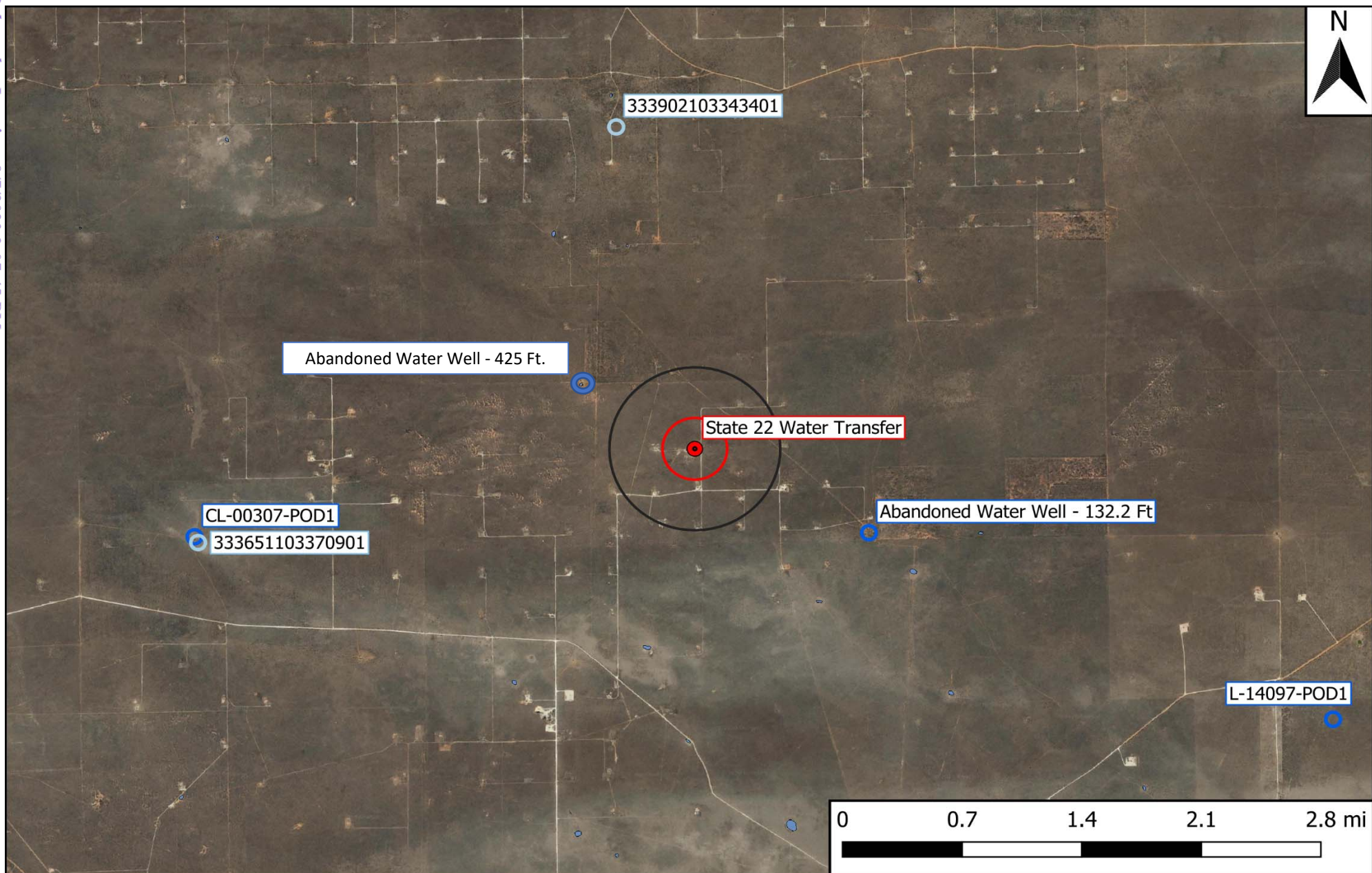
Drafted: mag

Checked: jwl

Date: 6/10/20

Figure 2

Aerial Proximity Map



Legend

- Site Location
- Well - NMOSE
- Well - USGS
- High Karst
- Potash Mine Workings

- 0.5 Mi Radius
- 1000 Ft Radius
- 1% Annual Flood Chance
- Lake/Freshwater Pond
- Emergent/Forested Wetlands
- Riverine

Figure 2
Aerial Map
Endeavor Energy Resources, LP
State 22 Water Transfer Line
GPS: 33.622009, -103.569111
Chaves County

eTECH
Environmental & Safety Solutions, Inc.

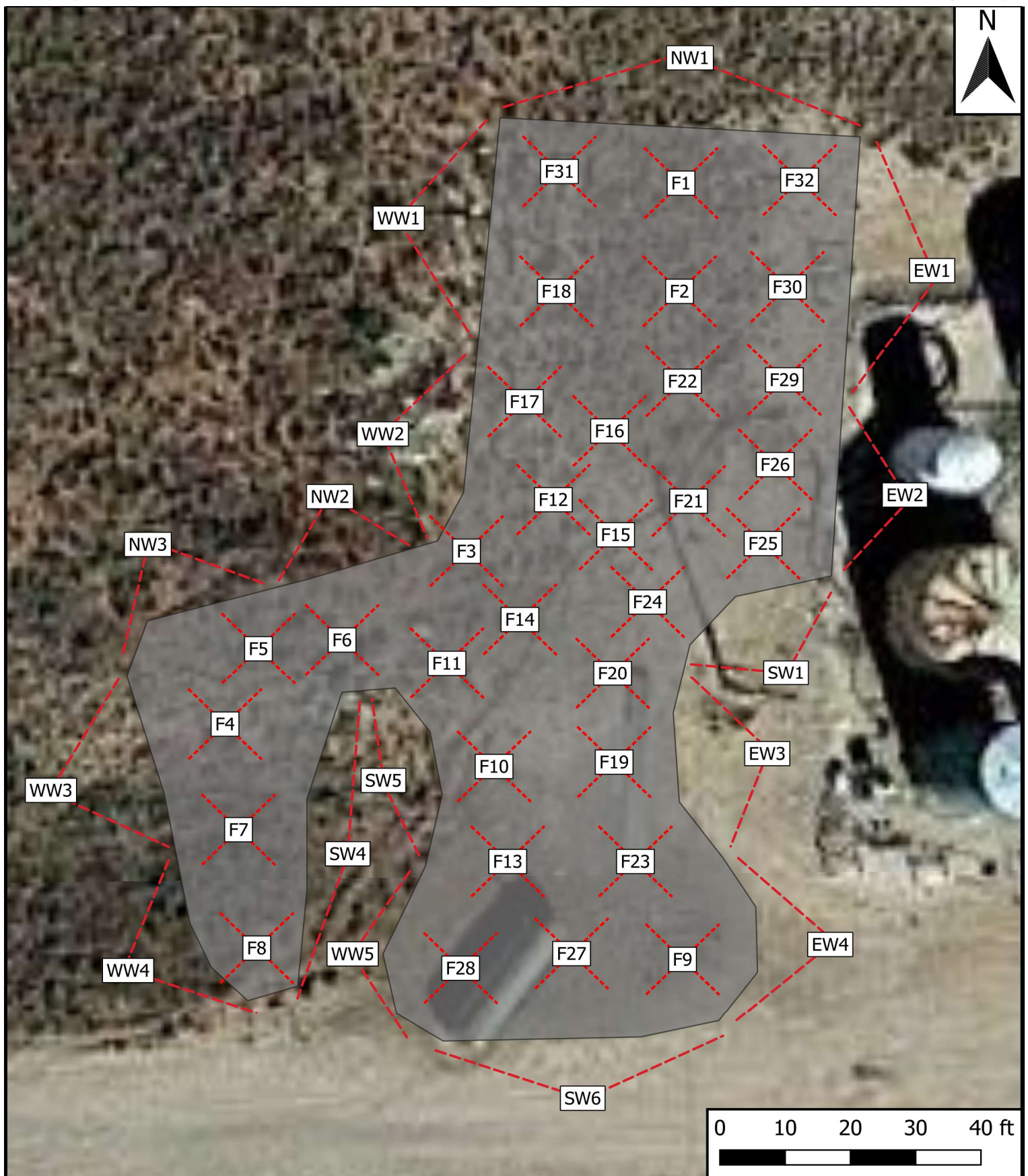
Drafted: mag

Checked: jwl

Date: 11/17/20

Figure 3

Site and Sample Location Map

**Legend**

-  Excavation
-  Floor Sample
-  Wall Sample

Figure 3

Site and Sample Location Map
Endeavor Energy Resources, LP
State 22 Water Transfer Line
GPS: 33.622009, -103.569111
Chaves County



Drafted: mag

Checked: jwl

Date: 11/13/20

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

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL
Endeavor Energy Resources, LP
State 22 Water Transfer Line
NMOCD Ref. #: nRM2030426190

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	20,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
SH @ Surface	6/11/2020	0'	In-Situ	<0.00200	0.00203	<49.9	117	117	59.5	177	636
SH @ 1'	6/11/2020	1'	In-Situ	<0.00199	<0.00199	<50.0	115	115	52.6	168	65.1
NH @ Surface	6/11/2020	0'	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	7.21
NH @ 1'	6/11/2020	1'	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	<5.01
WHA @ Surface	6/11/2020	0'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	<4.97
WHA @ 1'	6/11/2020	1'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	<4.99
V1 @ 2.5' R	6/11/2020	2.5'	In-Situ	0.00909	0.434	<50.0	274	274	<50.0	274	1,060
V2 @ 1' R	6/11/2020	1'	In-Situ	<0.00201	0.00277	<49.8	<49.8	<49.8	<49.8	<49.8	14,700
V3 @ 2' R	6/11/2020	2'	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	13,300
EHB @ Surface	6/11/2020	0'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	47.9
EHB @ 1'	6/11/2020	1'	In-Situ	<0.00200	<0.00200	<49.8	57.9	57.9	<49.8	57.9	35.6
V1 @ 3'	6/24/2020	3'	In-Situ	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	4,970
V1 @ 4'	6/24/2020	4'	In-Situ	<0.00200	<0.00200	<50.0	449	449	50.7	500	1,600
V2 @ 2'	6/24/2020	2'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	461
V3 @ 3'	6/24/2020	3'	In-Situ	<0.00201	<0.00201	<49.9	151	151	<49.9	151	1,280
V3 @ 4'	6/24/2020	4'	In-Situ	<0.00201	<0.00201	<50.0	92.5	92.5	<50.0	92.5	514
V4 @ Surf.	6/24/2020	0'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	16.7
V4 @ 1'	6/24/2020	1'	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	1,640
V4 @ 2'	6/24/2020	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	1,850
V4 @ 3'	6/24/2020	3'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	5,270
V4 @ 4'	6/24/2020	4'	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	48.1
V5 @ Surf.	6/24/2020	0'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	23.9
V5 @ 1'	6/24/2020	1'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	11.7
F1-3'	9/16/2020	3'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	380
NW1	9/16/2020	N/A	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	119
S1	9/16/2020	N/A	In-Situ	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	150
E1	9/16/2020	N/A	In-Situ	<0.00201	<0.00201	<50.0	81.4	81.4	<50.0	81.4	364
W1	9/16/2020	N/A	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	172
EW #1	9/17/2020	N/A	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	253
WW #2	9/17/2020	N/A	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	127
F8-2'	9/17/2020	2'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	25.8
F2 @ 4'	9/18/2020	4'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	12.1
F4 @ 4'	9/18/2020	4'	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	5,560
WW3	9/18/2020	N/A	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	61.3
WW4	9/18/2020	N/A	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	39.2
NW3	9/18/2020	N/A	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	13.3
NW2	9/21/2020	N/A	In-Situ	<0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	80.0
SW4	9/21/2020	N/A	In-Situ	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	25.4
EW3	9/25/2020	N/A	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	214
WW4	9/25/2020	N/A	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	70.7
F9	9/25/2020	4'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	344

NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL
Endeavor Energy Resources, LP
State 22 Water Transfer Line
NMOCD Ref. #: nRM2030426190

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	20,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
SW5	9/28/2020	N/A	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	26.0
SW6	9/28/2020	N/A	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	27.4
EW4	9/28/2020	N/A	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	219
WW5	9/28/2020	N/A	In-Situ	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	497
F5 @ 4'	9/29/2020	4'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	396
F6 @ 4'	9/29/2020	4'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	392
F7	9/29/2020	4'	In-Situ	<0.00198	<0.00198	<49.9	367	367	62.7	430	11,800
F10 @ 4'	9/29/2020	4'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	385
F11 @ 4'	9/29/2020	4'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	409
F12 @ 4'	9/29/2020	4'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	421
F13 @ 4'	9/29/2020	4'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	381
F14 @ 2'	9/29/2020	2'	In-Situ	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	321
F15 @ 2'	9/29/2020	2'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	323
F16 @ 2'	9/29/2020	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	327
F17 @ 2'	9/29/2020	2'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	331
F18 @ 2'	9/29/2020	2'	In-Situ	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	204
F19 @ 2'	9/29/2020	2'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	214
F20 @ 2'	9/29/2020	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	204
F21 @ 2'	9/29/2020	2'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	211
F22 @ 2'	9/29/2020	2'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	204
F23 @ 2'	9/29/2020	2'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	157
F24 @ 2'	9/29/2020	2'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	274
F25 @ 2'	9/29/2020	2'	In-Situ	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	288
F26 @ 2'	9/29/2020	2'	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	286
F27 @ 2'	9/29/2020	2'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	158
F28 @ 2'	9/29/2020	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	164
F29 @ 2'	9/29/2020	2'	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	241
F30 @ 2'	9/29/2020	2'	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	242
F31 @ 2'	9/29/2020	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	187
F32 @ 2'	9/29/2020	2'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	198

NOTES:

- = Sample not analyzed for that constituent.

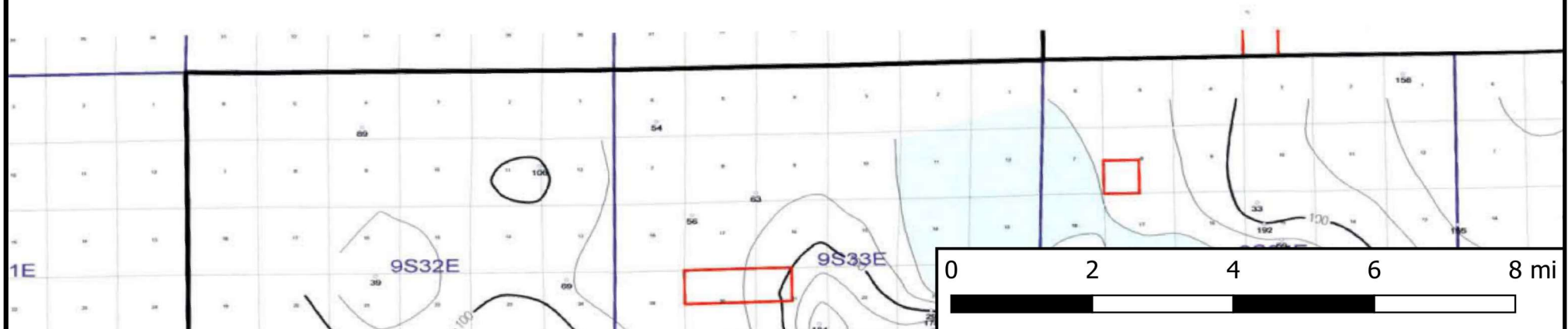
Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

Appendix A

Depth to Groundwater Information



State 22 Water Transfer



Legend

 Site Location

Figure 4

Inferred Depth to Groundwater Trend Map
Endeavor Energy Resources, LP
State 22 Water Transfer Line
GPS: 33.622009, -103.569111
Chaves County



Drafted: mag

Checked: jwl

Date: 6/10/20



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CL 00314 POD1		CL	CH	1	2	2	34	08S	33E	634611	3716897	4663	220	157	63
CL 00307 POD1		CL	CH	2	3	4	13	08S	32E	628014	3720298	4791	195	165	30

Average Depth to Water: **161 feet**

Minimum Depth: **157 feet**

Maximum Depth: **165 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 632727.28

Northing (Y): 3721164.18

Radius: 4830

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.

6/10/20 9:30 AM

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
CL 00307	POD1	2	3	4	13	08S	32E	628014	3720298

x

Driller License: 1497 **Driller Company:** COX DRILLING

Driller Name: COX, TOM W.

Drill Start Date: 05/15/2015

Drill Finish Date: 05/15/2015

Plug Date:

Log File Date: 05/29/2015

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield: 1 GPM

Casing Size: 5.00

Depth Well: 195 feet

Depth Water: 165 feet

x

Water Bearing Stratifications:

Top	Bottom	Description
165	175	Sandstone/Gravel/Conglomerate

x

Casing Perforations:

Top	Bottom
125	195

x

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.

6/10/20 9:30 AM

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
	CL 00314 POD1	1	2	2	34	08S	33E	634611	3716897

x

Driller License: 1626 **Driller Company:** TAYLOR, ROY ALLEN

Driller Name: TAYLOR, ROY A.

Drill Start Date: 04/18/2016	Drill Finish Date: 04/20/2016	Plug Date:
Log File Date: 04/29/2016	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 5 GPM
Casing Size: 5.00	Depth Well: 220 feet	Depth Water: 157 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	116	135	Sandstone/Gravel/Conglomerate
	135	185	Sandstone/Gravel/Conglomerate
	182	205	Sandstone/Gravel/Conglomerate

x

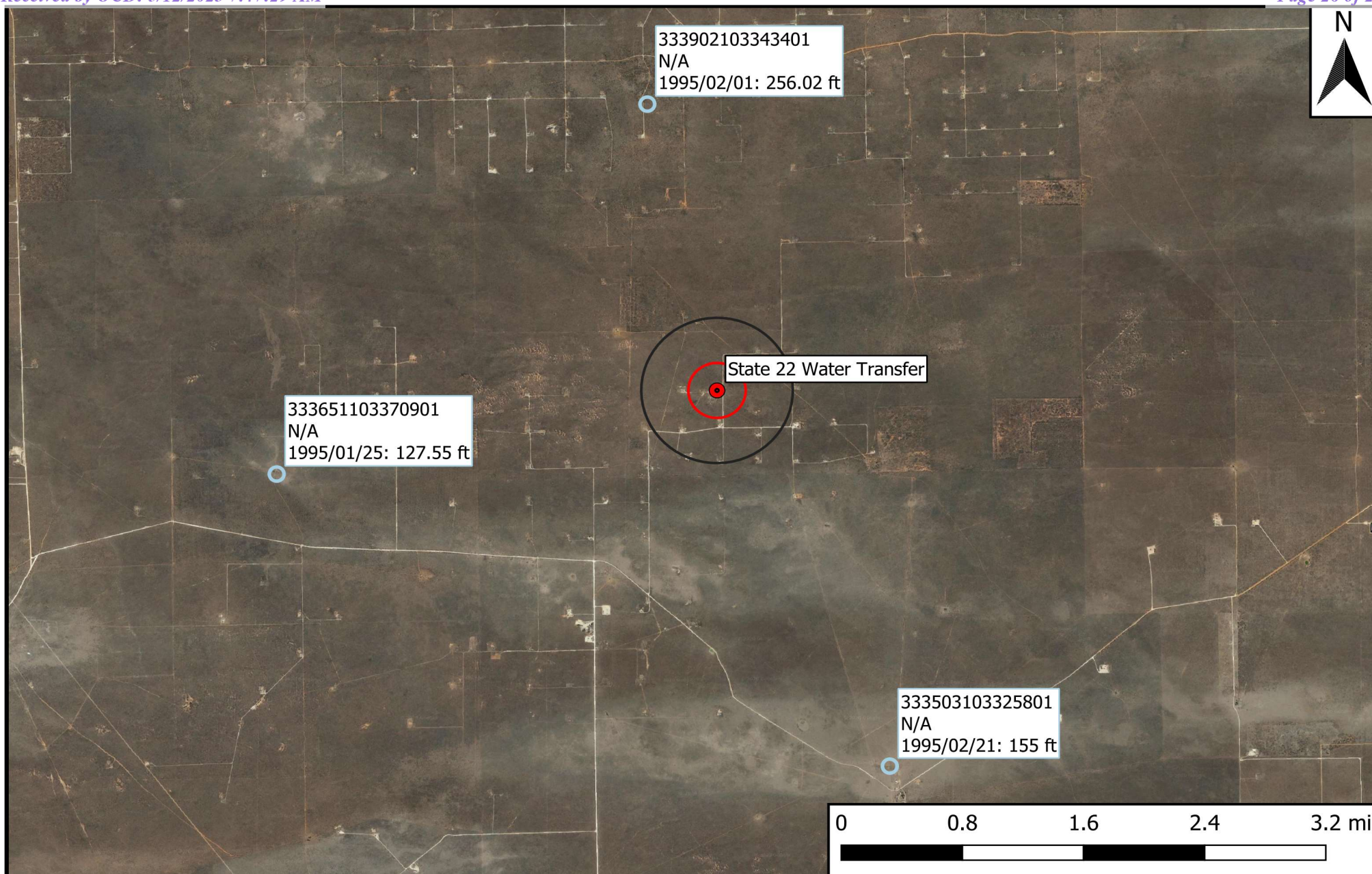
Casing Perforations:	Top	Bottom
	160	220

x

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6/10/20 9:30 AM

POINT OF DIVERSION SUMMARY



Legend

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

Figure 5

USGS Well Proximity Map
 Endeavor Energy Resources, LP
 State 22 Water Transfer Line
 GPS: 33.622009, -103.569111
 Chaves County



Drafted: mag

Checked: jwl

Date: 6/10/20



National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 333902103343401

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

USGS 333902103343401 08S.33E.04.114343

Chaves County, New Mexico
Latitude 33°39'02", Longitude 103°34'34" NAD27
Land-surface elevation 4,423 feet above NGVD29
The depth of the well is 453 feet below land surface.

Output formats

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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1995-02-01		D	256.02			2		S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 333651103370901

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

USGS 333651103370901 08s.32e.13.43421

Chaves County, New Mexico
Latitude 33°36'51", Longitude 103°37'09" NAD27
Land-surface elevation 4,418 feet above NGVD29
The depth of the hole is 180.00 feet below land surface.

Output formats

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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1995-01-25		D	127.55			2		S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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National Water Information System: Web Interface

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Data Category:

Groundwater

Geographic Area:

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 333503103325801

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

USGS 333503103325801 08S.33E.34.212211

Chaves County, New Mexico
Latitude 33°35'03", Longitude 103°32'58" NAD27
Land-surface elevation 4,355 feet above NGVD29
The depth of the well is 180 feet below land surface.

Output formats

Table of data

Tab-separated data

Graph of data

Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1995-02-21		D	155			0		S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	0	Water level accuracy to nearest foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Appendix B

Field Data and Soil Profile Logs



Initial Release Assessment Form

Project: State 22 Water Transfer Clean Up Level: 20,000 mg/kg Cl-, 2,500 mg/kg TPH
 Date: 6/24/20
 Project Number: 12538 Latitude: 33.622009 Longitude: -103.569111

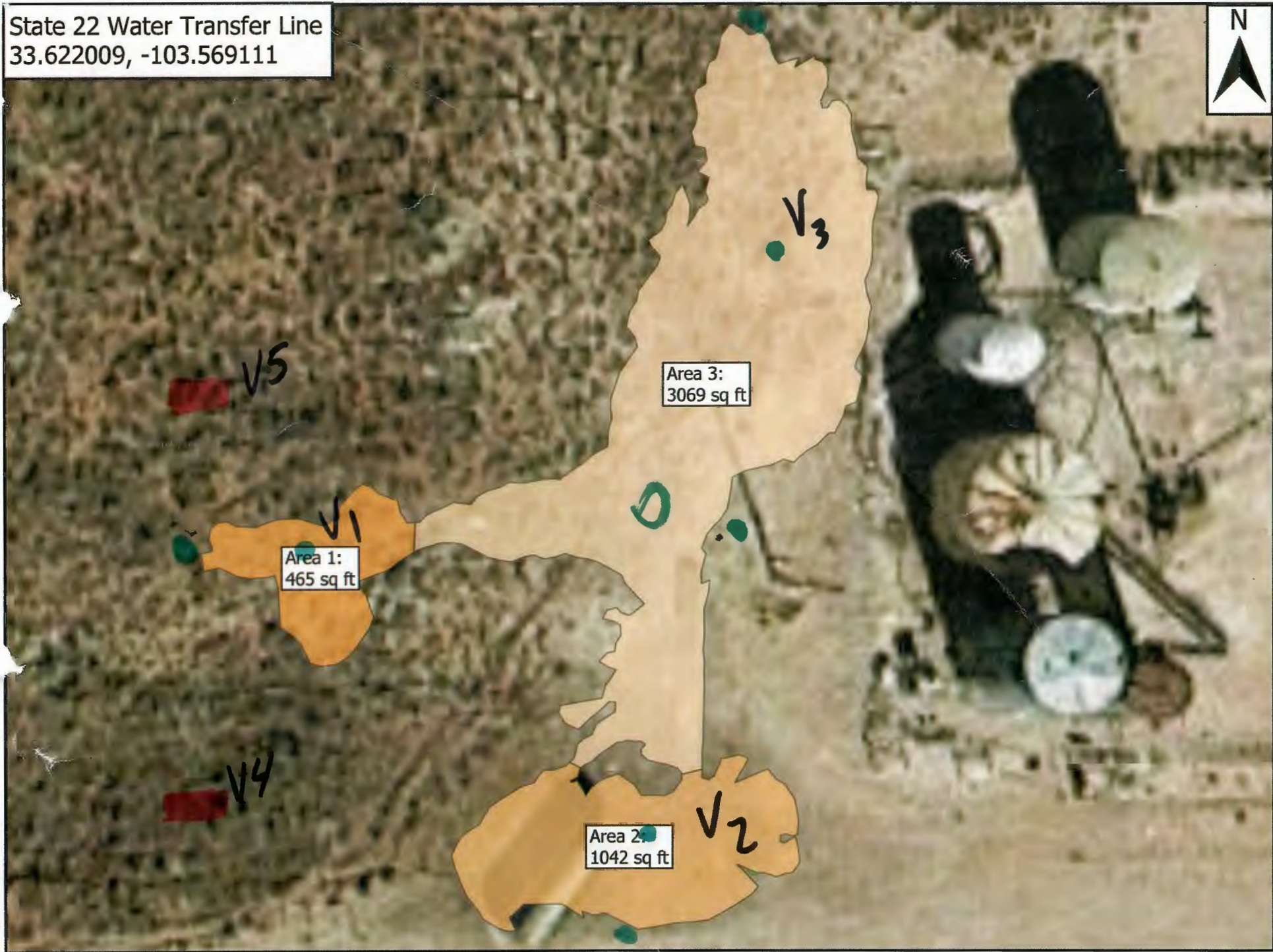
Site Diagram

*See attached Map for
site diagram.*

Notes: *Had Caliche mounds hard on getting difficult. Release at 1'-2', using*

~Length:	~Width:	~Area:	~Depth:	Yes	No
3-4 Representative Pictures of the Affected Area including sample locations?				☒	☐
Necessary Samples Field Screened and on Ice?				☒	☐
Sample and Field Screen Data Entered on Sample Log?				☒	☐
Was horizontal and vertical delineation achieved?				☒	☐

State 22 Water Transfer Line
33.622009, -103.569111



Sample Log

Date:

6/11/2020

Project: State 22 Water Transfer

Project Number: 12538

Latitude: 33.622009

Longitude: -103.569111

Sample ID	PID/Odor	Chloride Conc.	GPS
EH @ Surf	Yes	248	
EH @ 1'	Yes	464	
SH @ Surf	—	556	
SH @ 1'	—	4124 → 348	
WH @ Surf	—	1744	
WH @ 1'	—	> 2504	
NH @ Surf	—	168	
NH @ 1'	—	248	
EHA @ Surf	—	> 2504	
EHA @ 1'	—	> 2504 → 424	
WHA @ Surf	—	124	
WHA @ 1'	—	< 124	
VZ @ Surf	Yes	14808	L+H
VZ @ 1' - R	Yes	12340	L+H
V1 @ Surf	Yes	8900	L+H
V1 @ 2'	Yes	19368	L+H
V1 @ 2.5' - R	Yes	15528	L+H
V3 @ Surf	—	8048	L+H
V3 @ 1'	—	9584	L+H
V3 @ 2' - R	—	14004	L+H
EHB @ Surf	—	196	
EHB @ 1'	—	464	

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



Sample Log

Date: 6-24-26Project: State 22 Water Transfer Line

Project Number: _____ Latitude: _____

Longitude: _____

Sample ID	PID/Odor	Chloride Conc.	GPS
V1@3'	moderate	22604	
V1@4'	moderate	992	
V2@2'	none	536	
V3@3'	mild	1064 TR	
V3@4'	mild	11692	
V4@5 surface	none	<128	
V4@1'	none	1216	
V4@2'	none	1692	
V4@3'	moderate	22604	
V4@4'	none	864	
V5 surface	none	<128	
V5@1'	none	128	
EW1	none	300	
NW1	none	616, 7132	
F1@3'	none	300	
WW1	none	1816, 208	
SW1	none	300	
WW2	none	376	
EW2 EW2	none	316	
F8@2'	none	7132	
F2@4'	none	364	
NW3 NW3	none	120	
WW@	none	120	
F@2'	none	516	
SW4	none	364	
NW2	none	224	
SW5	none	464	
F7@4'	none	5,644	
WW4	none	616, 7268	
EW3	none	364	
F9@2'	none	364	
EW4	none	412	
SW6	none	148	
F5@4'	none	688	
F6@4'	none	688	
F10@4'	none	688	

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



Sample Log

Date: 6-24-20

Project: State 22 water transfer line

Project Number: _____ Latitude: _____ Longitude: _____

[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: 6/24/20

Project: State 22 Water Transfer
Project Number: 12538 Latitude: 33.622009 Longitude: -103.569111

Depth (ft. bgs)		Description
1	----- 0.5	Brown Rodley Soil
2		caliche
3	----- 2.5	
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
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Appendix C

Laboratory Analytical Reports



Certificate of Analysis Summary 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer

Project Id: 12538
Contact: PM
Project Location: Endeavor

Date Received in Lab: Mon 06.15.2020 09:35
Report Date: 06.22.2020 16:28
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	664362-001	664362-002	664362-003	664362-004	664362-005	664362-006
	<i>Field Id:</i>	SH @ Surface	SH @ 1'	NH @ Surface	NH @ 1'	WHA @ Surface	WHA @ 1'
	<i>Depth:</i>		1- ft		1- ft		1- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	06.11.2020 00:00	06.11.2020 00:00	06.11.2020 00:00	06.11.2020 00:00	06.11.2020 00:00	06.11.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	06.19.2020 15:15	06.19.2020 15:15	06.19.2020 15:15	06.19.2020 15:15	06.19.2020 15:15	06.19.2020 15:15
	<i>Analyzed:</i>	06.20.2020 05:09	06.20.2020 05:29	06.20.2020 05:49	06.20.2020 06:10	06.20.2020 06:30	06.20.2020 06:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Toluene		0.00203 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00403 0.00403	<0.00404 0.00404	<0.00399 0.00399	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		0.00203 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	06.15.2020 11:50	06.15.2020 11:50	06.15.2020 11:50	06.15.2020 11:50	06.15.2020 11:50	06.15.2020 11:50
	<i>Analyzed:</i>	06.15.2020 13:34	06.15.2020 13:53	06.15.2020 13:59	06.15.2020 14:18	06.15.2020 14:25	06.15.2020 14:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		636 5.05	65.1 4.99	7.21 4.99	<5.01 5.01	<4.97 4.97	<4.99 4.99
TPH By SW8015 Mod	<i>Extracted:</i>	06.16.2020 12:15	06.16.2020 12:15	06.16.2020 12:15	06.16.2020 12:15	06.16.2020 12:15	06.16.2020 12:15
	<i>Analyzed:</i>	06.16.2020 17:39	06.16.2020 18:00	06.16.2020 18:22	06.16.2020 18:43	06.16.2020 19:05	06.16.2020 19:26
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		117 49.9	115 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		59.5 49.9	52.6 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total TPH		177 49.9	168 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager



Certificate of Analysis Summary 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer

Project Id: 12538
Contact: PM
Project Location: Endeavor

Date Received in Lab: Mon 06.15.2020 09:35
Report Date: 06.22.2020 16:28
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	664362-007	664362-008	664362-009	664362-010	664362-011	
	<i>Field Id:</i>	V2 @ 1' R	V1 @ 2.5' R	V3 @ 2' R	EHB @ Surface	EHB @ 1'	
	<i>Depth:</i>	1- ft	2.5- ft	2- ft		1- ft	
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	06.11.2020 00:00	06.11.2020 00:00	06.11.2020 00:00	06.11.2020 00:00	06.11.2020 00:00	
BTEX by EPA 8021B	<i>Extracted:</i>	06.19.2020 15:15	06.19.2020 15:15	06.19.2020 15:15	06.19.2020 15:15	06.19.2020 15:15	
	<i>Analyzed:</i>	06.20.2020 07:11	06.20.2020 07:31	06.20.2020 07:52	06.20.2020 10:23	06.20.2020 10:43	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00201 0.00201	0.00909 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	
Toluene		0.00277 0.00201	0.0944 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	
Ethylbenzene		<0.00201 0.00201	0.168 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	
m,p-Xylenes		<0.00402 0.00402	0.109 0.00402	<0.00402 0.00402	<0.00400 0.00400	<0.00400 0.00400	
o-Xylene		<0.00201 0.00201	0.0538 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	
Total Xylenes		<0.00201 0.00201	0.163 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	
Total BTEX		0.00277 0.00201	0.434 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	
Chloride by EPA 300	<i>Extracted:</i>	06.15.2020 11:50	06.15.2020 11:50	06.15.2020 11:50	06.15.2020 11:50	06.15.2020 15:00	
	<i>Analyzed:</i>	06.15.2020 14:37	06.15.2020 14:44	06.15.2020 14:50	06.15.2020 14:56	06.15.2020 19:38	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		14700 99.0	1060 4.96	13300 101	47.9 5.02	35.6 4.96	
TPH By SW8015 Mod	<i>Extracted:</i>	06.16.2020 12:15	06.16.2020 12:15	06.16.2020 12:15	06.16.2020 12:15	06.16.2020 12:00	
	<i>Analyzed:</i>	06.16.2020 19:48	06.16.2020 20:09	06.16.2020 20:30	06.16.2020 20:52	06.17.2020 03:46	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	
Diesel Range Organics (DRO)		<49.8 49.8	274 50.0	<49.9 49.9	<50.0 50.0	57.9 49.8	
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	
Total TPH		<49.8 49.8	274 50.0	<49.9 49.9	<50.0 50.0	57.9 49.8	

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Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager



Analytical Report 664362

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

State 22 Water Transfer

12538

06.22.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-34), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.22.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: XENCO Report No(s): **664362**

State 22 Water Transfer

Project Address: Endeavor

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 664362. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 664362 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 664362****Etech Environmental & Safety Solution, Inc, Midland, TX**

State 22 Water Transfer

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SH @ Surface	S	06.11.2020 00:00		664362-001
SH @ 1'	S	06.11.2020 00:00	1 ft	664362-002
NH @ Surface	S	06.11.2020 00:00		664362-003
NH @ 1'	S	06.11.2020 00:00	1 ft	664362-004
WHA @ Surface	S	06.11.2020 00:00		664362-005
WHA @ 1'	S	06.11.2020 00:00	1 ft	664362-006
V2 @ 1' R	S	06.11.2020 00:00	1 ft	664362-007
V1 @ 2.5' R	S	06.11.2020 00:00	2.5 ft	664362-008
V3 @ 2' R	S	06.11.2020 00:00	2 ft	664362-009
EHB @ Surface	S	06.11.2020 00:00		664362-010
EHB @ 1'	S	06.11.2020 00:00	1 ft	664362-011



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: State 22 Water Transfer

Project ID: 12538
Work Order Number(s): 664362

Report Date: 06.22.2020
Date Received: 06.15.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3129609 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Samples affected are: 7705919-1-BKS, 7705919-1-BLK, 7705919-1-BSD, 664211-018 S, 664211-018 SD, 664362-006, 664362-007, 664362-008, 664362-009, 664362-010, 664362-005, 664362-004, 664362-011, 664362-002, 664362-001, 664362-003.

The ending CCV was bias high for Benzene, ethylbenzene, m,p-Xylenes, and o-Xylene. All samples reported did not take hits for those analytes, therefore data was accepted.



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **SH @ Surface**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-001

Date Collected: 06.11.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.15.2020 11:50

Basis: Wet Weight

Seq Number: 3129045

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	636	5.05	mg/kg	06.15.2020 13:34		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.16.2020 12:15

Basis: Wet Weight

Seq Number: 3129216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.16.2020 17:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	117	49.9	mg/kg	06.16.2020 17:39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	59.5	49.9	mg/kg	06.16.2020 17:39		1
Total TPH	PHC635	177	49.9	mg/kg	06.16.2020 17:39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	06.16.2020 17:39	
o-Terphenyl	84-15-1	97	%	70-130	06.16.2020 17:39	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **SH @ Surface**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-001

Date Collected: 06.11.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.20.2020 05:09	U	1
Toluene	108-88-3	0.00203	0.00200	mg/kg	06.20.2020 05:09		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.20.2020 05:09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.20.2020 05:09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.20.2020 05:09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.20.2020 05:09	U	1
Total BTEX		0.00203	0.00200	mg/kg	06.20.2020 05:09		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	147	%	70-130	06.20.2020 05:09	**	
1,4-Difluorobenzene	540-36-3	81	%	70-130	06.20.2020 05:09		



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **SH @ 1'** Matrix: Soil Date Received: 06.15.2020 09:35
 Lab Sample Id: 664362-002 Date Collected: 06.11.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 06.15.2020 11:50 Basis: Wet Weight
 Seq Number: 3129045

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.1	4.99	mg/kg	06.15.2020 13:53		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 06.16.2020 12:15 Basis: Wet Weight
 Seq Number: 3129216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.16.2020 18:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	115	50.0	mg/kg	06.16.2020 18:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	52.6	50.0	mg/kg	06.16.2020 18:00		1
Total TPH	PHC635	168	50.0	mg/kg	06.16.2020 18:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	06.16.2020 18:00	
o-Terphenyl	84-15-1	105	%	70-130	06.16.2020 18:00	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **SH @ 1'**
Lab Sample Id: 664362-002

Matrix: Soil
Date Collected: 06.11.2020 00:00

Date Received: 06.15.2020 09:35
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.20.2020 05:29	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.20.2020 05:29	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.20.2020 05:29	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.20.2020 05:29	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.20.2020 05:29	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.20.2020 05:29	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.20.2020 05:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	154	%	70-130	06.20.2020 05:29	**	
1,4-Difluorobenzene	540-36-3	83	%	70-130	06.20.2020 05:29		



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **NH @ Surface**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-003

Date Collected: 06.11.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.15.2020 11:50

Basis: Wet Weight

Seq Number: 3129045

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.21	4.99	mg/kg	06.15.2020 13:59		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.16.2020 12:15

Basis: Wet Weight

Seq Number: 3129216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.16.2020 18:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.16.2020 18:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.16.2020 18:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.16.2020 18:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	06.16.2020 18:22	
o-Terphenyl	84-15-1	94	%	70-130	06.16.2020 18:22	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **NH @ Surface**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-003

Date Collected: 06.11.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.20.2020 05:49	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.20.2020 05:49	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.20.2020 05:49	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.20.2020 05:49	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.20.2020 05:49	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.20.2020 05:49	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.20.2020 05:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	85	%	70-130	06.20.2020 05:49		
4-Bromofluorobenzene	460-00-4	159	%	70-130	06.20.2020 05:49	**	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **NH @ 1'**
Lab Sample Id: 664362-004

Matrix: Soil
Date Collected: 06.11.2020 00:00

Date Received: 06.15.2020 09:35
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3129045

Date Prep: 06.15.2020 11:50

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.01	5.01	mg/kg	06.15.2020 14:18	U	1

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3129216

Date Prep: 06.16.2020 12:15

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.16.2020 18:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.16.2020 18:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.16.2020 18:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.16.2020 18:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	06.16.2020 18:43	
o-Terphenyl	84-15-1	101	%	70-130	06.16.2020 18:43	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **NH @ 1'**
Lab Sample Id: 664362-004

Matrix: Soil
Date Collected: 06.11.2020 00:00

Date Received: 06.15.2020 09:35
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.20.2020 06:10	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.20.2020 06:10	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.20.2020 06:10	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	06.20.2020 06:10	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.20.2020 06:10	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.20.2020 06:10	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.20.2020 06:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	82	%	70-130	06.20.2020 06:10		
4-Bromofluorobenzene	460-00-4	173	%	70-130	06.20.2020 06:10	**	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **WHA @ Surface**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-005

Date Collected: 06.11.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.15.2020 11:50

Basis: Wet Weight

Seq Number: 3129045

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.97	4.97	mg/kg	06.15.2020 14:25	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.16.2020 12:15

Basis: Wet Weight

Seq Number: 3129216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.16.2020 19:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.16.2020 19:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.16.2020 19:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.16.2020 19:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	06.16.2020 19:05	
o-Terphenyl	84-15-1	99	%	70-130	06.16.2020 19:05	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **WHA @ Surface**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-005

Date Collected: 06.11.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.20.2020 06:30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.20.2020 06:30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.20.2020 06:30	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	06.20.2020 06:30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.20.2020 06:30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.20.2020 06:30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.20.2020 06:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	85	%	70-130	06.20.2020 06:30		
4-Bromofluorobenzene	460-00-4	171	%	70-130	06.20.2020 06:30	**	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **WHA @ 1'**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-006

Date Collected: 06.11.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.15.2020 11:50

Basis: Wet Weight

Seq Number: 3129045

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	06.15.2020 14:31	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.16.2020 12:15

Basis: Wet Weight

Seq Number: 3129216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.16.2020 19:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.16.2020 19:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.16.2020 19:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.16.2020 19:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	06.16.2020 19:26	
o-Terphenyl	84-15-1	100	%	70-130	06.16.2020 19:26	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **WHA @ 1'**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-006

Date Collected: 06.11.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.20.2020 06:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.20.2020 06:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.20.2020 06:51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.20.2020 06:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.20.2020 06:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.20.2020 06:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.20.2020 06:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	170	%	70-130	06.20.2020 06:51	**	
1,4-Difluorobenzene	540-36-3	83	%	70-130	06.20.2020 06:51		



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: V2 @ 1' R

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-007

Date Collected: 06.11.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.15.2020 11:50

Basis: Wet Weight

Seq Number: 3129045

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14700	99.0	mg/kg	06.15.2020 14:37		20

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.16.2020 12:15

Basis: Wet Weight

Seq Number: 3129216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.16.2020 19:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.16.2020 19:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.16.2020 19:48	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.16.2020 19:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	06.16.2020 19:48	
o-Terphenyl	84-15-1	99	%	70-130	06.16.2020 19:48	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **V2 @ 1' R**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-007

Date Collected: 06.11.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.20.2020 07:11	U	1
Toluene	108-88-3	0.00277	0.00201	mg/kg	06.20.2020 07:11		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.20.2020 07:11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.20.2020 07:11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.20.2020 07:11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.20.2020 07:11	U	1
Total BTEX		0.00277	0.00201	mg/kg	06.20.2020 07:11		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	162	%	70-130	06.20.2020 07:11	**	
1,4-Difluorobenzene	540-36-3	81	%	70-130	06.20.2020 07:11		



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: V1 @ 2.5' R

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-008

Date Collected: 06.11.2020 00:00

Sample Depth: 2.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.15.2020 11:50

Basis: Wet Weight

Seq Number: 3129045

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1060	4.96	mg/kg	06.15.2020 14:44		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.16.2020 12:15

Basis: Wet Weight

Seq Number: 3129216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.16.2020 20:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	274	50.0	mg/kg	06.16.2020 20:09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.16.2020 20:09	U	1
Total TPH	PHC635	274	50.0	mg/kg	06.16.2020 20:09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	06.16.2020 20:09	
o-Terphenyl	84-15-1	106	%	70-130	06.16.2020 20:09	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **V1 @ 2.5' R**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-008

Date Collected: 06.11.2020 00:00

Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00909	0.00201	mg/kg	06.20.2020 07:31		1
Toluene	108-88-3	0.0944	0.00201	mg/kg	06.20.2020 07:31		1
Ethylbenzene	100-41-4	0.168	0.00201	mg/kg	06.20.2020 07:31		1
m,p-Xylenes	179601-23-1	0.109	0.00402	mg/kg	06.20.2020 07:31		1
o-Xylene	95-47-6	0.0538	0.00201	mg/kg	06.20.2020 07:31		1
Total Xylenes	1330-20-7	0.163	0.00201	mg/kg	06.20.2020 07:31		1
Total BTEX		0.434	0.00201	mg/kg	06.20.2020 07:31		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	86	%	70-130	06.20.2020 07:31		
4-Bromofluorobenzene	460-00-4	191	%	70-130	06.20.2020 07:31	**	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: V3 @ 2' R

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-009

Date Collected: 06.11.2020 00:00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.15.2020 11:50

Basis: Wet Weight

Seq Number: 3129045

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13300	101	mg/kg	06.15.2020 14:50		20

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.16.2020 12:15

Basis: Wet Weight

Seq Number: 3129216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.16.2020 20:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.16.2020 20:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.16.2020 20:30	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.16.2020 20:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	06.16.2020 20:30	
o-Terphenyl	84-15-1	102	%	70-130	06.16.2020 20:30	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: V3 @ 2' R

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-009

Date Collected: 06.11.2020 00:00

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.20.2020 07:52	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.20.2020 07:52	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.20.2020 07:52	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.20.2020 07:52	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.20.2020 07:52	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.20.2020 07:52	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.20.2020 07:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	76	%	70-130	06.20.2020 07:52		
4-Bromofluorobenzene	460-00-4	157	%	70-130	06.20.2020 07:52	**	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **EHB @ Surface**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-010

Date Collected: 06.11.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.15.2020 11:50

Basis: Wet Weight

Seq Number: 3129045

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	47.9	5.02	mg/kg	06.15.2020 14:56		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.16.2020 12:15

Basis: Wet Weight

Seq Number: 3129216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.16.2020 20:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.16.2020 20:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.16.2020 20:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.16.2020 20:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	06.16.2020 20:52	
o-Terphenyl	84-15-1	100	%	70-130	06.16.2020 20:52	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **EHB @ Surface**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-010

Date Collected: 06.11.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.20.2020 10:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.20.2020 10:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.20.2020 10:23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.20.2020 10:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.20.2020 10:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.20.2020 10:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.20.2020 10:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	161	%	70-130	06.20.2020 10:23	**	
1,4-Difluorobenzene	540-36-3	80	%	70-130	06.20.2020 10:23		



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **EHB @ 1'** Matrix: Soil Date Received: 06.15.2020 09:35
 Lab Sample Id: 664362-011 Date Collected: 06.11.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 06.15.2020 15:00 Basis: Wet Weight
 Seq Number: 3129048

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	35.6	4.96	mg/kg	06.15.2020 19:38		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 06.16.2020 12:00 Basis: Wet Weight
 Seq Number: 3129214

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.17.2020 03:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	57.9	49.8	mg/kg	06.17.2020 03:46		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.17.2020 03:46	U	1
Total TPH	PHC635	57.9	49.8	mg/kg	06.17.2020 03:46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	06.17.2020 03:46	
o-Terphenyl	84-15-1	117	%	70-130	06.17.2020 03:46	



Certificate of Analytical Results 664362

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer

Sample Id: **EHB @ 1'**

Matrix: Soil

Date Received: 06.15.2020 09:35

Lab Sample Id: 664362-011

Date Collected: 06.11.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.19.2020 15:15

Basis: Wet Weight

Seq Number: 3129609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.20.2020 10:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.20.2020 10:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.20.2020 10:43	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.20.2020 10:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.20.2020 10:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.20.2020 10:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.20.2020 10:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	162	%	70-130	06.20.2020 10:43	**	
1,4-Difluorobenzene	540-36-3	79	%	70-130	06.20.2020 10:43		



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer

Analytical Method: Chloride by EPA 300

Seq Number: 3129045

MB Sample Id: 7705455-1-BLK

Matrix: Solid

LCS Sample Id: 7705455-1-BKS

Prep Method: E300P

Date Prep: 06.15.2020

LCSD Sample Id: 7705455-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	257	103	258	103	90-110	0	20	mg/kg	06.15.2020 11:56	

Analytical Method: Chloride by EPA 300

Seq Number: 3129048

MB Sample Id: 7705489-1-BLK

Matrix: Solid

LCS Sample Id: 7705489-1-BKS

Prep Method: E300P

Date Prep: 06.15.2020

LCSD Sample Id: 7705489-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	259	104	260	104	90-110	0	20	mg/kg	06.15.2020 16:40	

Analytical Method: Chloride by EPA 300

Seq Number: 3129045

Parent Sample Id: 664339-104

Matrix: Soil

MS Sample Id: 664339-104 S

Prep Method: E300P

Date Prep: 06.15.2020

MSD Sample Id: 664339-104 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.95	248	278	112	275	111	90-110	1	20	mg/kg	06.15.2020 12:14	X

Analytical Method: Chloride by EPA 300

Seq Number: 3129045

Parent Sample Id: 664362-001

Matrix: Soil

MS Sample Id: 664362-001 S

Prep Method: E300P

Date Prep: 06.15.2020

MSD Sample Id: 664362-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	636	253	867	91	867	91	90-110	0	20	mg/kg	06.15.2020 13:40	

Analytical Method: Chloride by EPA 300

Seq Number: 3129048

Parent Sample Id: 664452-004

Matrix: Soil

MS Sample Id: 664452-004 S

Prep Method: E300P

Date Prep: 06.15.2020

MSD Sample Id: 664452-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	178	252	462	113	447	107	90-110	3	20	mg/kg	06.15.2020 16:59	X

Analytical Method: Chloride by EPA 300

Seq Number: 3129048

Parent Sample Id: 664452-008

Matrix: Soil

MS Sample Id: 664452-008 S

Prep Method: E300P

Date Prep: 06.15.2020

MSD Sample Id: 664452-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	258	252	529	108	524	106	90-110	1	20	mg/kg	06.15.2020 18:28	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc
State 22 Water Transfer

Analytical Method: TPH By SW8015 Mod

Seq Number: 3129214

MB Sample Id: 7705538-1-BLK

Matrix: Solid

LCS Sample Id: 7705538-1-BKS

Prep Method: SW8015P

Date Prep: 06.16.2020

LCSD Sample Id: 7705538-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1050	105	1050	105	70-130	0	20	mg/kg	06.17.2020 01:35	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1050	105	70-130	0	20	mg/kg	06.17.2020 01:35	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date	Flag		
1-Chlorooctane	120		129		129		70-130	%	06.17.2020 01:35			
o-Terphenyl	126		122		126		70-130	%	06.17.2020 01:35			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3129216

MB Sample Id: 7705540-1-BLK

Matrix: Solid

LCS Sample Id: 7705540-1-BKS

Prep Method: SW8015P

Date Prep: 06.16.2020

LCSD Sample Id: 7705540-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	866	87	904	90	70-130	4	20	mg/kg	06.16.2020 12:15	
Diesel Range Organics (DRO)	<50.0	1000	947	95	968	97	70-130	2	20	mg/kg	06.16.2020 12:15	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date	Flag		
1-Chlorooctane	98		102		105		70-130	%	06.16.2020 12:15			
o-Terphenyl	98		101		106		70-130	%	06.16.2020 12:15			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3129214

Matrix: Solid
MB Sample Id: 7705538-1-BLK

Prep Method: SW8015P

Date Prep: 06.16.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.17.2020 01:16	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3129216

Matrix: Solid
MB Sample Id: 7705540-1-BLK

Prep Method: SW8015P

Date Prep: 06.16.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.16.2020 11:54	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer

Analytical Method: TPH By SW8015 Mod

Seq Number: 3129214

Parent Sample Id: 664364-021

Matrix: Soil

MS Sample Id: 664364-021 S

Prep Method: SW8015P

Date Prep: 06.16.2020

MSD Sample Id: 664364-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	1080	108	1100	110	70-130	2	20	mg/kg	06.17.2020 02:31	
Diesel Range Organics (DRO)	<49.9	997	1100	110	1110	111	70-130	1	20	mg/kg	06.17.2020 02:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		130		70-130	%	06.17.2020 02:31
o-Terphenyl	125		124		70-130	%	06.17.2020 02:31

Analytical Method: TPH By SW8015 Mod

Seq Number: 3129216

Parent Sample Id: 664339-101

Matrix: Soil

MS Sample Id: 664339-101 S

Prep Method: SW8015P

Date Prep: 06.16.2020

MSD Sample Id: 664339-101 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	861	86	848	85	70-130	2	20	mg/kg	06.16.2020 13:20	
Diesel Range Organics (DRO)	<49.9	997	945	95	927	93	70-130	2	20	mg/kg	06.16.2020 13:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		101		70-130	%	06.16.2020 13:20
o-Terphenyl	100		98		70-130	%	06.16.2020 13:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3129609

MB Sample Id: 7705919-1-BLK

Matrix: Solid

LCS Sample Id: 7705919-1-BKS

Prep Method: SW5035A

Date Prep: 06.19.2020

LCSD Sample Id: 7705919-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.110	110	0.113	113	70-130	3	35	mg/kg	06.20.2020 02:28	
Toluene	<0.00200	0.100	0.104	104	0.107	107	70-130	3	35	mg/kg	06.20.2020 02:28	
Ethylbenzene	<0.00200	0.100	0.106	106	0.110	110	70-130	4	35	mg/kg	06.20.2020 02:28	
m,p-Xylenes	<0.00400	0.200	0.217	109	0.225	113	70-130	4	35	mg/kg	06.20.2020 02:28	
o-Xylene	<0.00200	0.100	0.109	109	0.113	113	70-130	4	35	mg/kg	06.20.2020 02:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	81		84		88		70-130	%	06.20.2020 02:28
4-Bromofluorobenzene	156	**	147	**	155	**	70-130	%	06.20.2020 02:28

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc
State 22 Water Transfer

Analytical Method: BTEX by EPA 8021B

Seq Number: 3129609

Parent Sample Id: 664211-018

Matrix: Soil

MS Sample Id: 664211-018 S

Prep Method: SW5035A

Date Prep: 06.19.2020

MSD Sample Id: 664211-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0947	95	0.0913	91	70-130	4	35	mg/kg	06.20.2020 03:08	
Toluene	<0.00199	0.0996	0.0842	85	0.0815	82	70-130	3	35	mg/kg	06.20.2020 03:08	
Ethylbenzene	<0.00199	0.0996	0.0879	88	0.0851	85	70-130	3	35	mg/kg	06.20.2020 03:08	
m,p-Xylenes	<0.00398	0.199	0.174	87	0.169	85	70-130	3	35	mg/kg	06.20.2020 03:08	
o-Xylene	<0.00199	0.0996	0.0912	92	0.0889	89	70-130	3	35	mg/kg	06.20.2020 03:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		89		70-130	%	06.20.2020 03:08
4-Bromofluorobenzene	155	**	156	**	70-130	%	06.20.2020 03:08

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 12538

664367

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Project Manager:	Joel Lowry	Bill to: (if different)	Tiffany Fawks
Company Name:	Etech Environmental & Safety	Company Name:	Endeavor
Address:	3100 Plains Highway	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to PM@etechenv.com + Client

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Work Order Comments
 Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
 State of Project:
 Reporting: Level I ☐ Level II ☐ PST/US ☐ TRR ☐ Level II ☐
 Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name: State 22 Water Transfer		Turn Around		ANALYSIS REQUEST																Preservative Codes															
Project Number: 12538		Routine: ☒																		HNO3: HN															
Project Location: Endeavor		Rush: ☐																		H2SO4: H2															
Sampler's Name: Matt Grieco		Due Date:																		HCL: HL															
PO #:																				None: NO															
SAMPLE RECEIPT		Temp Blank: Yes ☐ No ☒		Wet Ice: ☒ Yes ☐ No ☐																		NaOH: Na													
Temperature (°C): 42.38		Thermometer ID: 128		MeOH: Me																															
Received Intact: Yes ☒ No ☐		Correction Factor: -0.4		Zn Acetate+ NaOH: Zn																															
Cooler Custody Seals: Yes ☒ No ☐ N/A		Total Containers: 0.4		TAT starts the day received by the lab, if received by 4:30pm																															
Sample Custody Seals: Yes ☒ No ☐ N/A																				Sample Comments															
Sample Identification		Matrix																		Date Sampled		Time Sampled		Depth		Number of Containers/Preservative Code		Chloride E300		BTX 8021		TPH Modified Ext		TPH TX-4005	
SH@ Surf.		S																		6-11-20						✓		✓		✓		✓			
SH@ 1'		S																		6-11-20				1'		✓		✓		✓		✓			
NH@ Surf.		S		6-11-20						✓		✓		✓		✓																			
NH@ 1'		S		6-11-20				1'		✓		✓		✓		✓																			
WH@e Surf.		S		6-11-20						✓		✓		✓		✓																			
WH@e 1'		S		6-11-20				1'		✓		✓		✓		✓																			
V2@ 1'-R		S		6-11-20				1'		✓		✓		✓		✓																			
V1@ 2.5-R		S		6-11-20				2 1/2'		✓		✓		✓		✓																			
V3@ 2'-R		S		6-11-20				2'		✓		✓		✓		✓																			
EH@e Surf.		S		6-11-20						✓		✓		✓		✓																			
Total 200.7/6010		200.8/6020:																																	

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	Relinquished by: (Signature)		Received by: (Signature)		Date/Time
1	<i>[Signature]</i>	<i>[Signature]</i>			2	<i>[Signature]</i>	<i>[Signature]</i>		
3					4				
5					6				6/15/93



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 12538

664365

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Project Manager:	Joel Lowry	Bill to: (if different)	Tiffany Fawks
Company Name:	Etech Environmental & Safety	Company Name:	Endeavor
Address:	3100 Plains Highway	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to PM@etechenv.com + Client

Work Order Comments			
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐			
State of Project:			
Reporting: Level I ☐ Level II ☐ PST/US ☐ TRR ☐ Level III ☐			
Deliverables: EDD ☐ ADaPT ☐ Other: ☐			

[illegible]

Total 200.7 / 6010		200.8 / 6020:		8RCRA		13PPM		Texas 11		Al		Sb		As		Ba		Be		B		Cd		Ca		Cr		Co		Cu		Fe		Pb		Mg		Mn		Mo		Ni		K		Se		Ag		SiO2		Na		Sr		Ti		Sn		U		V		Zn															
Circle Method(s) and Metal(s) to be analyzed				TCLP / SPLP 6010:				8RCRA				Sb				As				Ba				Be				Cd				Cr				Co				Cu				Pb				Mn				Mo				Ni				Se				Ag				Ti				U				1631 / 245.1 / 7470 / 7471: Hg			

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Relinquished by: (Signature)		Received by: (Signature)		Date/Time	Relinquished by: (Signature)		Received by: (Signature)		Date/Time
1	<i>[Signature]</i>		<i>[Signature]</i>		2	<i>[Signature]</i>		<i>[Signature]</i>	6/15 935
3					4				
5					6				

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 06.12.2020 04.20.49 PM

Work Order #: 664362

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

BTEX RECEIVED IN BULK
CONTAINER

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 06.15.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.15.2020



Certificate of Analysis Summary 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Fri 06.26.2020 10:40
Report Date: 06.30.2020 21:13
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	665645-001	665645-002	665645-003	665645-004	665645-005	665645-006
	<i>Field Id:</i>	V5 @ Surf.	V5 @ 1'	V4 @ Surf.	V4 @ 1'	V4 @ 2'	V4 @ 3'
	<i>Depth:</i>	0- ft	1- ft	0- ft	1- ft	2- ft	3- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	06.24.2020 00:00	06.24.2020 00:00	06.24.2020 00:00	06.24.2020 00:00	06.24.2020 00:00	06.24.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	06.29.2020 15:30	06.29.2020 15:30	06.29.2020 15:30	06.29.2020 15:30	06.29.2020 15:30	06.29.2020 15:30
	<i>Analyzed:</i>	06.30.2020 00:09	06.30.2020 00:30	06.30.2020 00:50	06.30.2020 01:11	06.30.2020 01:31	06.30.2020 01:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00400 0.00400	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00400 0.00400	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	06.30.2020 10:45	06.30.2020 10:45	06.30.2020 10:45	06.30.2020 10:45	06.30.2020 10:45	06.30.2020 10:45
	<i>Analyzed:</i>	06.30.2020 11:04	06.30.2020 11:20	06.30.2020 11:25	06.30.2020 11:30	06.30.2020 11:35	06.30.2020 11:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		23.9 4.96	11.7 5.00	16.7 5.02	1640 24.8	1850 25.0	5270 50.5
TPH By SW8015 Mod	<i>Extracted:</i>	06.26.2020 16:30	06.26.2020 16:30	06.26.2020 16:30	06.26.2020 16:30	06.26.2020 16:30	06.26.2020 16:30
	<i>Analyzed:</i>	06.26.2020 20:47	06.26.2020 21:52	06.26.2020 22:13	06.26.2020 22:34	06.26.2020 22:55	06.26.2020 23:17
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager



Certificate of Analysis Summary 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Fri 06.26.2020 10:40
Report Date: 06.30.2020 21:13
Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 665645-007 Field Id: V4 @ 4' Depth: 4- ft Matrix: SOIL Sampled: 06.24.2020 00:00					
BTEX by EPA 8021B	Extracted: 06.29.2020 15:30 Analyzed: 06.30.2020 02:12 Units/RL: mg/kg RL					
Benzene	<0.00198 0.00198					
Toluene	<0.00198 0.00198					
Ethylbenzene	<0.00198 0.00198					
m,p-Xylenes	<0.00397 0.00397					
o-Xylene	<0.00198 0.00198					
Total Xylenes	<0.00198 0.00198					
Total BTEX	<0.00198 0.00198					
Chloride by EPA 300	Extracted: 06.30.2020 10:45 Analyzed: 06.30.2020 11:55 Units/RL: mg/kg RL					
Chloride	48.1 5.05					
TPH By SW8015 Mod	Extracted: 06.26.2020 16:30 Analyzed: 06.26.2020 23:38 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	<49.9 49.9					
Diesel Range Organics (DRO)	<49.9 49.9					
Motor Oil Range Hydrocarbons (MRO)	<49.9 49.9					
Total TPH	<49.9 49.9					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Manager



Analytical Report 665645

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

State 22 Water Transfer Line

12538

06.30.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



06.30.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: XENCO Report No(s): **665645**

State 22 Water Transfer Line

Project Address: Rural Chavez

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 665645. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 665645 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 665645****Etech Environmental & Safety Solution, Inc, Midland, TX**

State 22 Water Transfer Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
V5 @ Surf.	S	06.24.2020 00:00	0 ft	665645-001
V5 @ 1'	S	06.24.2020 00:00	1 ft	665645-002
V4 @ Surf.	S	06.24.2020 00:00	0 ft	665645-003
V4 @ 1'	S	06.24.2020 00:00	1 ft	665645-004
V4 @ 2'	S	06.24.2020 00:00	2 ft	665645-005
V4 @ 3'	S	06.24.2020 00:00	3 ft	665645-006
V4 @ 4'	S	06.24.2020 00:00	4 ft	665645-007

**CASE NARRATIVE****Client Name: Etech Environmental & Safety Solution, Inc****Project Name: State 22 Water Transfer Line**

Project ID: 12538
Work Order Number(s): 665645

Report Date: 06.30.2020
Date Received: 06.26.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3130369 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected.

Samples affected are: 665645-003.

Lab Sample ID 665645-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 665645-001, -002, -003, -004, -005, -006, -007.

The Laboratory Control Sample for m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V5 @ Surf.

Matrix: Soil

Date Received: 06.26.2020 10:40

Lab Sample Id: 665645-001

Date Collected: 06.24.2020 00:00

Sample Depth: 0 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.30.2020 10:45

Basis: Wet Weight

Seq Number: 3130388

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.9	4.96	mg/kg	06.30.2020 11:04		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.26.2020 16:30

Basis: Wet Weight

Seq Number: 3130173

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.26.2020 20:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.26.2020 20:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.26.2020 20:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.26.2020 20:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	06.26.2020 20:47	
o-Terphenyl	84-15-1	89	%	70-130	06.26.2020 20:47	



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **V5 @ Surf.**

Matrix: Soil

Date Received: 06.26.2020 10:40

Lab Sample Id: 665645-001

Date Collected: 06.24.2020 00:00

Sample Depth: 0 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.30.2020 00:09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.30.2020 00:09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.30.2020 00:09	UX	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.30.2020 00:09	UX	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.30.2020 00:09	UX	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.30.2020 00:09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.30.2020 00:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.30.2020 00:09		
4-Bromofluorobenzene	460-00-4	85	%	70-130	06.30.2020 00:09		



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V5 @ 1'
Lab Sample Id: 665645-002

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3130388

Date Prep: 06.30.2020 10:45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.7	5.00	mg/kg	06.30.2020 11:20		1

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3130173

Date Prep: 06.26.2020 16:30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.26.2020 21:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.26.2020 21:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.26.2020 21:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.26.2020 21:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	06.26.2020 21:52	
o-Terphenyl	84-15-1	92	%	70-130	06.26.2020 21:52	



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V5 @ 1'
Lab Sample Id: 665645-002

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.30.2020 00:30	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.30.2020 00:30	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.30.2020 00:30	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.30.2020 00:30	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.30.2020 00:30	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.30.2020 00:30	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.30.2020 00:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	06.30.2020 00:30		
1,4-Difluorobenzene	540-36-3	112	%	70-130	06.30.2020 00:30		



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **V4 @ Surf.**

Matrix: Soil

Date Received: 06.26.2020 10:40

Lab Sample Id: 665645-003

Date Collected: 06.24.2020 00:00

Sample Depth: 0 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 06.30.2020 10:45

Basis: Wet Weight

Seq Number: 3130388

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.7	5.02	mg/kg	06.30.2020 11:25		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 06.26.2020 16:30

Basis: Wet Weight

Seq Number: 3130173

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.26.2020 22:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.26.2020 22:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.26.2020 22:13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.26.2020 22:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	06.26.2020 22:13	
o-Terphenyl	84-15-1	91	%	70-130	06.26.2020 22:13	



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **V4 @ Surf.**

Matrix: Soil

Date Received: 06.26.2020 10:40

Lab Sample Id: 665645-003

Date Collected: 06.24.2020 00:00

Sample Depth: 0 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.30.2020 00:50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.30.2020 00:50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.30.2020 00:50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.30.2020 00:50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.30.2020 00:50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.30.2020 00:50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.30.2020 00:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	06.30.2020 00:50		
4-Bromofluorobenzene	460-00-4	66	%	70-130	06.30.2020 00:50	**	



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V4 @ 1'
Lab Sample Id: 665645-004

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3130388

Date Prep: 06.30.2020 10:45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1640	24.8	mg/kg	06.30.2020 11:30		5

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3130173

Date Prep: 06.26.2020 16:30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.26.2020 22:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.26.2020 22:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.26.2020 22:34	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.26.2020 22:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	06.26.2020 22:34	
o-Terphenyl	84-15-1	99	%	70-130	06.26.2020 22:34	



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V4 @ 1'
Lab Sample Id: 665645-004

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.30.2020 01:11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.30.2020 01:11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.30.2020 01:11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.30.2020 01:11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.30.2020 01:11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.30.2020 01:11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.30.2020 01:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.30.2020 01:11		
4-Bromofluorobenzene	460-00-4	104	%	70-130	06.30.2020 01:11		



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V4 @ 2'
Lab Sample Id: 665645-005

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3130388

Date Prep: 06.30.2020 10:45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1850	25.0	mg/kg	06.30.2020 11:35		5

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3130173

Date Prep: 06.26.2020 16:30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.26.2020 22:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.26.2020 22:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.26.2020 22:55	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.26.2020 22:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	06.26.2020 22:55	
o-Terphenyl	84-15-1	98	%	70-130	06.26.2020 22:55	



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V4 @ 2'
Lab Sample Id: 665645-005

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.30.2020 01:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.30.2020 01:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.30.2020 01:31	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	06.30.2020 01:31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.30.2020 01:31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.30.2020 01:31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.30.2020 01:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	06.30.2020 01:31		
4-Bromofluorobenzene	460-00-4	103	%	70-130	06.30.2020 01:31		



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V4 @ 3'
Lab Sample Id: 665645-006

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3130388

Date Prep: 06.30.2020 10:45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5270	50.5	mg/kg	06.30.2020 11:50		10

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3130173

Date Prep: 06.26.2020 16:30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.26.2020 23:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.26.2020 23:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.26.2020 23:17	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.26.2020 23:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	06.26.2020 23:17	
o-Terphenyl	84-15-1	97	%	70-130	06.26.2020 23:17	



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V4 @ 3'

Matrix: Soil

Date Received: 06.26.2020 10:40

Lab Sample Id: 665645-006

Date Collected: 06.24.2020 00:00

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.30.2020 01:52	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.30.2020 01:52	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.30.2020 01:52	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.30.2020 01:52	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.30.2020 01:52	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.30.2020 01:52	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.30.2020 01:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	111	%	70-130	06.30.2020 01:52		
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.30.2020 01:52		



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V4 @ 4'
Lab Sample Id: 665645-007

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3130388

Date Prep: 06.30.2020 10:45

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	48.1	5.05	mg/kg	06.30.2020 11:55		1

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3130173

Date Prep: 06.26.2020 16:30

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.26.2020 23:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	06.26.2020 23:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.26.2020 23:38	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	06.26.2020 23:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	06.26.2020 23:38	
o-Terphenyl	84-15-1	94	%	70-130	06.26.2020 23:38	



Certificate of Analytical Results 665645

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V4 @ 4'
Lab Sample Id: 665645-007

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	06.30.2020 02:12	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	06.30.2020 02:12	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	06.30.2020 02:12	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	06.30.2020 02:12	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	06.30.2020 02:12	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	06.30.2020 02:12	U	1
Total BTEX		<0.00198	0.00198	mg/kg	06.30.2020 02:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	06.30.2020 02:12		
4-Bromofluorobenzene	460-00-4	100	%	70-130	06.30.2020 02:12		



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc
State 22 Water Transfer Line

Analytical Method: Chloride by EPA 300

Seq Number: 3130388

MB Sample Id: 7706452-1-BLK

Matrix: Solid

LCS Sample Id: 7706452-1-BKS

Prep Method: E300P

Date Prep: 06.30.2020

LCSD Sample Id: 7706452-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	239	96	261	104	90-110	9	20	mg/kg	06.30.2020 10:54	

Analytical Method: Chloride by EPA 300

Seq Number: 3130388

Parent Sample Id: 665645-001

Matrix: Soil

MS Sample Id: 665645-001 S

Prep Method: E300P

Date Prep: 06.30.2020

MSD Sample Id: 665645-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.9	248	262	96	272	100	90-110	4	20	mg/kg	06.30.2020 11:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3130388

Parent Sample Id: 665648-007

Matrix: Soil

MS Sample Id: 665648-007 S

Prep Method: E300P

Date Prep: 06.30.2020

MSD Sample Id: 665648-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.8	250	262	98	283	106	90-110	8	20	mg/kg	06.30.2020 12:20	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3130173

MB Sample Id: 7706305-1-BLK

Matrix: Solid

LCS Sample Id: 7706305-1-BKS

Prep Method: SW8015P

Date Prep: 06.26.2020

LCSD Sample Id: 7706305-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	978	98	945	95	70-130	3	20	mg/kg	06.26.2020 20:04	
Diesel Range Organics (DRO)	<50.0	1000	978	98	985	99	70-130	1	20	mg/kg	06.26.2020 20:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		94		93		70-130	%	06.26.2020 20:04
o-Terphenyl	90		89		87		70-130	%	06.26.2020 20:04

Analytical Method: TPH By SW8015 Mod

Seq Number: 3130173

Matrix: Solid

MB Sample Id: 7706305-1-BLK

Prep Method: SW8015P

Date Prep: 06.26.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.26.2020 19:43	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3130173

Parent Sample Id: 665645-001

Matrix: Soil

MS Sample Id: 665645-001 S

Prep Method: SW8015P

Date Prep: 06.26.2020

MSD Sample Id: 665645-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	846	85	837	84	70-130	1	20	mg/kg	06.26.2020 21:09	
Diesel Range Organics (DRO)	<49.9	998	863	86	873	88	70-130	1	20	mg/kg	06.26.2020 21:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		98		70-130	%	06.26.2020 21:09
o-Terphenyl	90		91		70-130	%	06.26.2020 21:09

Analytical Method: BTEX by EPA 8021B

Seq Number: 3130369

MB Sample Id: 7706406-1-BLK

Matrix: Solid

LCS Sample Id: 7706406-1-BKS

Prep Method: SW5035A

Date Prep: 06.29.2020

LCSD Sample Id: 7706406-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.130	130	0.126	126	70-130	3	35	mg/kg	06.29.2020 22:06	
Toluene	<0.00200	0.100	0.106	106	0.105	105	70-130	1	35	mg/kg	06.29.2020 22:06	
Ethylbenzene	<0.00200	0.100	0.0970	97	0.0961	96	70-130	1	35	mg/kg	06.29.2020 22:06	
m,p-Xylenes	<0.00400	0.200	0.180	90	0.180	90	70-130	0	35	mg/kg	06.29.2020 22:06	
o-Xylene	<0.00200	0.100	0.0913	91	0.0912	91	70-130	0	35	mg/kg	06.29.2020 22:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		103		102		70-130	%	06.29.2020 22:06
4-Bromofluorobenzene	93		87		86		70-130	%	06.29.2020 22:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3130369

Parent Sample Id: 665645-001

Matrix: Soil

MS Sample Id: 665645-001 S

Prep Method: SW5035A

Date Prep: 06.29.2020

MSD Sample Id: 665645-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0840	84	0.0841	84	70-130	0	35	mg/kg	06.29.2020 22:47	
Toluene	<0.00200	0.100	0.0715	72	0.0878	88	70-130	20	35	mg/kg	06.29.2020 22:47	
Ethylbenzene	<0.00200	0.100	0.0670	67	0.0798	80	70-130	17	35	mg/kg	06.29.2020 22:47	X
m,p-Xylenes	<0.00400	0.200	0.131	66	0.158	79	70-130	19	35	mg/kg	06.29.2020 22:47	X
o-Xylene	<0.00200	0.100	0.0659	66	0.0792	80	70-130	18	35	mg/kg	06.29.2020 22:47	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		97		70-130	%	06.29.2020 22:47
4-Bromofluorobenzene	92		100		70-130	%	06.29.2020 22:47

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No:

Week 45

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Project Manager:		Lance Crenshaw		Bill to: (if different)	Teffanie Fawks
Company Name:		Etech Environmental and Safety		Company Name:	Endeavor
Address:		3100 Plains Hwy		Address:	
City, State ZIP:		Lovington, NM, 88260		City, State ZIP:	
Phone:		575-396-2378	Email:	Email Results to: PM@etechenv.com + Client	

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Work Order Comments

Program: UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐

State of Project:

Reporting: Level ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

[illegible]

Total 200.7 / 6010										200.8 / 6020:										8RCRA 13PPM Texas 11										Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag										SiO2 Na Sr Ti Sn U V Zn									
Circle Method(s) and Metal(s) to be analyzed										TCLP / SPLP 6010:										8RCRA										Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U										1631 / 245.1 / 7470 / 7471 : Hg									

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco. Its affiliates and subsidiaries. Xenco will be liable only for the cost of samples and shall not be responsible for any loss or damage to samples or to the results of analysis.

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Standard terms and conditions					
Any losses or expenses incurred by the client if such losses are due to circumstances beyond the control submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.					
Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
1					
3				June 25, 2020 3:04 AM	
5					
					June 25, 2020

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 06.26.2020 10.40.00 AM

Work Order #: 665645

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes BTEX was in bulk containe
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 06.26.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.26.2020



Xenco

Certificate of Analysis Summary 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Fri 06.26.2020 10:40
Report Date: 07.07.2020 12:24
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	665647-001	665647-002	665647-003	665647-004	665647-005	
	<i>Field Id:</i>	V1 @ 3'	V1 @ 4'	V2 @ 2'	V3 @ 3'	V3 @ 4'	
	<i>Depth:</i>	3- ft	4- ft	2- ft	3- ft	4- ft	
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	06.24.2020 00:00	06.24.2020 00:00	06.24.2020 00:00	06.24.2020 00:00	06.24.2020 00:00	
BTEX by EPA 8021B	<i>Extracted:</i>	06.29.2020 15:30	06.29.2020 15:30	06.29.2020 15:30	06.29.2020 15:30	06.29.2020 15:30	
	<i>Analyzed:</i>	06.30.2020 02:33	06.30.2020 02:53	06.30.2020 03:14	06.30.2020 04:36	06.30.2020 13:29	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	
m,p-Xylenes		<0.00403 0.00403	<0.00401 0.00401	<0.00398 0.00398	<0.00402 0.00402	<0.00402 0.00402	
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	
Chloride by EPA 300	<i>Extracted:</i>	06.26.2020 16:40	06.26.2020 16:40	06.26.2020 16:40	06.26.2020 16:40	06.26.2020 16:40	
	<i>Analyzed:</i>	06.26.2020 18:38	06.26.2020 18:53	06.26.2020 18:59	06.26.2020 19:04	06.26.2020 19:09	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		4970 25.0	1600 25.0	461 5.00	1280 25.0	514 5.00	
TPH By SW8015 Mod	<i>Extracted:</i>	06.26.2020 16:30	06.26.2020 16:30	06.26.2020 16:30	06.26.2020 16:30	06.26.2020 16:30	
	<i>Analyzed:</i>	06.26.2020 23:59	06.27.2020 00:20	06.27.2020 00:41	06.27.2020 01:24	06.27.2020 09:38	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	
Diesel Range Organics (DRO)		<49.8 49.8	449 50.0	<50.0 50.0	151 49.9	92.5 50.0	
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	50.7 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	
Total TPH		<49.8 49.8	500 50.0	<50.0 50.0	151 49.9	92.5 50.0	

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Xenco

Analytical Report 665647

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

State 22 Water Transfer Line

12538

07.07.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.07.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **665647**

State 22 Water Transfer Line

Project Address: Rural Chavez

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 665647. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 665647 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads "Holly Taylor".

Holly Taylor
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 665647****Etech Environmental & Safety Solution, Inc, Midland, TX**

State 22 Water Transfer Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
V1 @ 3'	S	06.24.2020 00:00	3 ft	665647-001
V1 @ 4'	S	06.24.2020 00:00	4 ft	665647-002
V2 @ 2'	S	06.24.2020 00:00	2 ft	665647-003
V3 @ 3'	S	06.24.2020 00:00	3 ft	665647-004
V3 @ 4'	S	06.24.2020 00:00	4 ft	665647-005



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: State 22 Water Transfer Line

Project ID: 12538
Work Order Number(s): 665647

Report Date: 07.07.2020
Date Received: 06.26.2020

Sample receipt non conformances and comments:

7/7/2020 1.001 Revised to correct sample IDs for 004 and 005 per Matthew Greico (email). HT

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **V1 @ 3'** Matrix: Soil Date Received: 06.26.2020 10:40
 Lab Sample Id: 665647-001 Date Collected: 06.24.2020 00:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 06.26.2020 16:40 Basis: Wet Weight
 Seq Number: 3130312

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4970	25.0	mg/kg	06.26.2020 18:38		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 06.26.2020 16:30 Basis: Wet Weight
 Seq Number: 3130173

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.26.2020 23:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.26.2020 23:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.26.2020 23:59	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.26.2020 23:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	06.26.2020 23:59	
o-Terphenyl	84-15-1	94	%	70-130	06.26.2020 23:59	



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V1 @ 3'
Lab Sample Id: 665647-001

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	06.30.2020 02:33	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	06.30.2020 02:33	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	06.30.2020 02:33	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	06.30.2020 02:33	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	06.30.2020 02:33	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	06.30.2020 02:33	U	1
Total BTEX		<0.00202	0.00202	mg/kg	06.30.2020 02:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	06.30.2020 02:33		
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.30.2020 02:33		



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **V1 @ 4'** Matrix: Soil Date Received: 06.26.2020 10:40
 Lab Sample Id: 665647-002 Date Collected: 06.24.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 06.26.2020 16:40 Basis: Wet Weight
 Seq Number: 3130312

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1600	25.0	mg/kg	06.26.2020 18:53		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 06.26.2020 16:30 Basis: Wet Weight
 Seq Number: 3130173

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.27.2020 00:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	449	50.0	mg/kg	06.27.2020 00:20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	50.7	50.0	mg/kg	06.27.2020 00:20		1
Total TPH	PHC635	500	50.0	mg/kg	06.27.2020 00:20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	06.27.2020 00:20	
o-Terphenyl	84-15-1	95	%	70-130	06.27.2020 00:20	



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V1 @ 4'
Lab Sample Id: 665647-002

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	06.30.2020 02:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	06.30.2020 02:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	06.30.2020 02:53	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	06.30.2020 02:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	06.30.2020 02:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	06.30.2020 02:53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	06.30.2020 02:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	06.30.2020 02:53		
1,4-Difluorobenzene	540-36-3	111	%	70-130	06.30.2020 02:53		



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V2 @ 2' Matrix: Soil Date Received: 06.26.2020 10:40
 Lab Sample Id: 665647-003 Date Collected: 06.24.2020 00:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 06.26.2020 16:40 Basis: Wet Weight
 Seq Number: 3130312

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	461	5.00	mg/kg	06.26.2020 18:59		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 06.26.2020 16:30 Basis: Wet Weight
 Seq Number: 3130173

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.27.2020 00:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.27.2020 00:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.27.2020 00:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.27.2020 00:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	06.27.2020 00:41	
o-Terphenyl	84-15-1	97	%	70-130	06.27.2020 00:41	



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V2 @ 2'
Lab Sample Id: 665647-003

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.30.2020 03:14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.30.2020 03:14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.30.2020 03:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.30.2020 03:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.30.2020 03:14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.30.2020 03:14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.30.2020 03:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.30.2020 03:14		
4-Bromofluorobenzene	460-00-4	98	%	70-130	06.30.2020 03:14		



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V3 @ 3' Matrix: Soil Date Received: 06.26.2020 10:40
 Lab Sample Id: 665647-004 Date Collected: 06.24.2020 00:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 06.26.2020 16:40 Basis: Wet Weight
 Seq Number: 3130312

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1280	25.0	mg/kg	06.26.2020 19:04		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 06.26.2020 16:30 Basis: Wet Weight
 Seq Number: 3130173

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	06.27.2020 01:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	151	49.9	mg/kg	06.27.2020 01:24		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	06.27.2020 01:24	U	1
Total TPH	PHC635	151	49.9	mg/kg	06.27.2020 01:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	06.27.2020 01:24	
o-Terphenyl	84-15-1	90	%	70-130	06.27.2020 01:24	



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V3 @ 3'
Lab Sample Id: 665647-004

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.30.2020 04:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.30.2020 04:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.30.2020 04:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.30.2020 04:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.30.2020 04:36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.30.2020 04:36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.30.2020 04:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	06.30.2020 04:36		
4-Bromofluorobenzene	460-00-4	97	%	70-130	06.30.2020 04:36		



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **V3 @ 4'** Matrix: Soil Date Received: 06.26.2020 10:40
 Lab Sample Id: 665647-005 Date Collected: 06.24.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 06.26.2020 16:40 Basis: Wet Weight
 Seq Number: 3130312

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	514	5.00	mg/kg	06.26.2020 19:09		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 06.26.2020 16:30 Basis: Wet Weight
 Seq Number: 3130173

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.27.2020 09:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	92.5	50.0	mg/kg	06.27.2020 09:38		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.27.2020 09:38	U	1
Total TPH	PHC635	92.5	50.0	mg/kg	06.27.2020 09:38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	06.27.2020 09:38	
o-Terphenyl	84-15-1	91	%	70-130	06.27.2020 09:38	



Certificate of Analytical Results 665647

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: V3 @ 4'
Lab Sample Id: 665647-005

Matrix: Soil
Date Collected: 06.24.2020 00:00

Date Received: 06.26.2020 10:40
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 06.29.2020 15:30

Basis: Wet Weight

Seq Number: 3130369

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.30.2020 13:29	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.30.2020 13:29	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.30.2020 13:29	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.30.2020 13:29	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.30.2020 13:29	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.30.2020 13:29	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.30.2020 13:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	06.30.2020 13:29		
4-Bromofluorobenzene	460-00-4	94	%	70-130	06.30.2020 13:29		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Xenco

QC Summary 665647

Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: Chloride by EPA 300

Seq Number: 3130312

MB Sample Id: 7706300-1-BLK

Matrix: Solid

LCS Sample Id: 7706300-1-BKS

Prep Method: E300P

Date Prep: 06.26.2020

LCSD Sample Id: 7706300-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	249	100	271	108	90-110	8	20	mg/kg	06.26.2020 16:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3130312

Parent Sample Id: 665657-004

Matrix: Soil

MS Sample Id: 665657-004 S

Prep Method: E300P

Date Prep: 06.26.2020

MSD Sample Id: 665657-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	343	250	587	98	590	99	90-110	1	20	mg/kg	06.26.2020 18:23	

Analytical Method: Chloride by EPA 300

Seq Number: 3130312

Parent Sample Id: 665695-005

Matrix: Soil

MS Sample Id: 665695-005 S

Prep Method: E300P

Date Prep: 06.26.2020

MSD Sample Id: 665695-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1050	250	1250	80	1230	72	90-110	2	20	mg/kg	06.26.2020 17:12	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3130173

MB Sample Id: 7706305-1-BLK

Matrix: Solid

LCS Sample Id: 7706305-1-BKS

Prep Method: SW8015P

Date Prep: 06.26.2020

LCSD Sample Id: 7706305-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	978	98	945	95	70-130	3	20	mg/kg	06.26.2020 20:04	
Diesel Range Organics (DRO)	<50.0	1000	978	98	985	99	70-130	1	20	mg/kg	06.26.2020 20:04	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		94		93		70-130	%	06.26.2020 20:04
o-Terphenyl	90		89		87		70-130	%	06.26.2020 20:04

Analytical Method: TPH By SW8015 Mod

Seq Number: 3130173

Matrix: Solid

MB Sample Id: 7706305-1-BLK

Prep Method: SW8015P

Date Prep: 06.26.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.26.2020 19:43	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3130173

Parent Sample Id: 665645-001

Matrix: Soil

MS Sample Id: 665645-001 S

Prep Method: SW8015P

Date Prep: 06.26.2020

MSD Sample Id: 665645-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	846	85	837	84	70-130	1	20	mg/kg	06.26.2020 21:09	
Diesel Range Organics (DRO)	<49.9	998	863	86	873	88	70-130	1	20	mg/kg	06.26.2020 21:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		98		70-130	%	06.26.2020 21:09
o-Terphenyl	90		91		70-130	%	06.26.2020 21:09

Analytical Method: BTEX by EPA 8021B

Seq Number: 3130369

MB Sample Id: 7706406-1-BLK

Matrix: Solid

LCS Sample Id: 7706406-1-BKS

Prep Method: SW5035A

Date Prep: 06.29.2020

LCSD Sample Id: 7706406-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.130	130	0.126	126	70-130	3	35	mg/kg	06.29.2020 22:06	
Toluene	<0.00200	0.100	0.106	106	0.105	105	70-130	1	35	mg/kg	06.29.2020 22:06	
Ethylbenzene	<0.00200	0.100	0.0970	97	0.0961	96	70-130	1	35	mg/kg	06.29.2020 22:06	
m,p-Xylenes	<0.00400	0.200	0.180	90	0.180	90	70-130	0	35	mg/kg	06.29.2020 22:06	
o-Xylene	<0.00200	0.100	0.0913	91	0.0912	91	70-130	0	35	mg/kg	06.29.2020 22:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		103		102		70-130	%	06.29.2020 22:06
4-Bromofluorobenzene	93		87		86		70-130	%	06.29.2020 22:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3130369

Parent Sample Id: 665645-001

Matrix: Soil

MS Sample Id: 665645-001 S

Prep Method: SW5035A

Date Prep: 06.29.2020

MSD Sample Id: 665645-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0840	84	0.0841	84	70-130	0	35	mg/kg	06.29.2020 22:47	
Toluene	<0.00200	0.100	0.0715	72	0.0878	88	70-130	20	35	mg/kg	06.29.2020 22:47	
Ethylbenzene	<0.00200	0.100	0.0670	67	0.0798	80	70-130	17	35	mg/kg	06.29.2020 22:47	X
m,p-Xylenes	<0.00400	0.200	0.131	66	0.158	79	70-130	19	35	mg/kg	06.29.2020 22:47	X
o-Xylene	<0.00200	0.100	0.0659	66	0.0792	80	70-130	18	35	mg/kg	06.29.2020 22:47	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		97		70-130	%	06.29.2020 22:47
4-Bromofluorobenzene	92		100		70-130	%	06.29.2020 22:47

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No:

: 106547

www.xenco.com Page 1 of 1

Project Manager:	Lance Crenshaw	Bill to: (if different)	Teffanie Fawks
Company Name:	Etech Environmental and Safety	Company Name:	Endeavor
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to: PM@etechenv.com + Client

Work Order Comments				
Program:	UST/PST ☐	PRF ☐	Brownfield ☐	RR ☐ Superfund ☐
State of Project:				
Reporting:	Level ☐	Level ☐	PST/US ☐	TRF ☐ Level ☐
Deliverables:	EDD ☐	ADaPT ☐	Other:	

[illegible]

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Ti	Sn	U	V	Zn
<i>Circle Method(s) and Metal(s) to be analyzed</i>			TCLP / SPLP 6010:		8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U											1631 / 245.1 / 7470 / 7471 ; Ha	

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
1					
3			02-25-20 3:04 PM		6/28
5					1040

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 06.26.2020 10.40.00 AM

Work Order #: 665647

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

TPH was in bulk container

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 06.26.2020

Checklist reviewed by:



Jessica Kramer

Date: 06.26.2020



Certificate of Analysis Summary 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chaez

Date Received in Lab: Mon 09.21.2020 00:00
Report Date: 09.22.2020 16:28
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673099-001	673099-002	673099-003	673099-004	673099-005	673099-006
	<i>Field Id:</i>	F1-3'	W1	NW1	S1	E1	WW #2
	<i>Depth:</i>	3- ft					
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.16.2020 00:00	09.16.2020 14:08	09.16.2020 00:00	09.16.2020 15:36	09.16.2020 00:00	09.17.2020 11:10
BTEX by EPA 8021B	<i>Extracted:</i>	09.21.2020 09:30	09.21.2020 09:30	09.21.2020 09:30	09.21.2020 09:30	09.21.2020 09:30	09.21.2020 09:30
	<i>Analyzed:</i>	09.21.2020 18:01	09.21.2020 18:22	09.21.2020 18:42	09.21.2020 19:03	09.21.2020 19:23	09.21.2020 19:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00397 0.00397	<0.00398 0.00398	<0.00398 0.00398	<0.00397 0.00397	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	09.21.2020 13:04	09.21.2020 13:04	09.21.2020 13:04	09.21.2020 13:04	09.21.2020 13:04	09.21.2020 13:04
	<i>Analyzed:</i>	09.21.2020 15:48	09.21.2020 16:04	09.21.2020 16:09	09.21.2020 16:15	09.21.2020 16:20	09.21.2020 16:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		380 4.98	172 5.00	119 5.04	150 4.98	364 24.8	127 4.99
TPH By SW8015 Mod	<i>Extracted:</i>	09.21.2020 12:00	09.21.2020 12:00	09.21.2020 12:00	09.21.2020 12:00	09.21.2020 12:00	09.21.2020 12:00
	<i>Analyzed:</i>	09.21.2020 13:24	09.21.2020 14:22	09.21.2020 14:42	09.21.2020 15:02	09.21.2020 15:21	09.21.2020 15:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	81.4 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	81.4 50.0	<49.9 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer



Certificate of Analysis Summary 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chaez

Date Received in Lab: Mon 09.21.2020 00:00
Report Date: 09.22.2020 16:28
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673099-007	673099-008	673099-009	673099-010	673099-011	673099-012
	<i>Field Id:</i>	F8-2'	EW #1	F2 @ 4'	F4 @ 4'	WW3	WW4
	<i>Depth:</i>			4- ft	4- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.17.2020 07:52	09.17.2020 14:30	09.18.2020 08:22	09.18.2020 10:56	09.18.2020 09:20	09.18.2020 09:35
BTEX by EPA 8021B	<i>Extracted:</i>	09.21.2020 09:30	09.21.2020 09:30	09.21.2020 09:30	09.21.2020 11:00	09.21.2020 11:00	09.21.2020 11:00
	<i>Analyzed:</i>	09.21.2020 20:04	09.21.2020 20:25	09.21.2020 13:19	09.21.2020 13:40	09.21.2020 14:00	09.21.2020 14:21
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398	<0.00402 0.00402	<0.00399 0.00399	<0.00397 0.00397
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	09.21.2020 13:04	09.21.2020 13:04	09.21.2020 13:04	09.21.2020 13:04	09.21.2020 13:04	09.21.2020 13:04
	<i>Analyzed:</i>	09.21.2020 16:41	09.21.2020 16:46	09.21.2020 16:52	09.21.2020 16:57	09.21.2020 17:02	09.21.2020 17:18
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		25.8 4.98	253 4.96	12.1 4.97	5560 50.2	61.3 5.00	39.2 4.99
TPH By SW8015 Mod	<i>Extracted:</i>	09.21.2020 12:00	09.21.2020 12:00	09.21.2020 12:00	09.21.2020 12:00	09.21.2020 12:00	09.21.2020 12:00
	<i>Analyzed:</i>	09.21.2020 16:01	09.21.2020 16:21	09.21.2020 16:40	09.21.2020 17:00	09.21.2020 17:39	09.21.2020 17:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chaez

Date Received in Lab: Mon 09.21.2020 00:00
Report Date: 09.22.2020 16:28
Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 673099-013 Field Id: NW3 Depth: Matrix: SOIL Sampled: 09.18.2020 09:13					
BTEX by EPA 8021B	Extracted: 09.21.2020 11:00 Analyzed: 09.21.2020 14:41 Units/RL: mg/kg RL					
Benzene	<0.00199 0.00199					
Toluene	<0.00199 0.00199					
Ethylbenzene	<0.00199 0.00199					
m,p-Xylenes	<0.00398 0.00398					
o-Xylene	<0.00199 0.00199					
Total Xylenes	<0.00199 0.00199					
Total BTEX	<0.00199 0.00199					
Chloride by EPA 300	Extracted: 09.21.2020 13:04 Analyzed: 09.21.2020 17:23 Units/RL: mg/kg RL					
Chloride	13.3 5.04					
TPH By SW8015 Mod	Extracted: 09.21.2020 12:00 Analyzed: 09.21.2020 18:19 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	<49.9 49.9					
Diesel Range Organics (DRO)	<49.9 49.9					
Motor Oil Range Hydrocarbons (MRO)	<49.9 49.9					
Total TPH	<49.9 49.9					

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 673099

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

State 22 Water Transfer Line

12538

09.22.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.22.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **673099**

State 22 Water Transfer Line

Project Address: Rural Chaez

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 673099. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 673099 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 673099****Etech Environmental & Safety Solution, Inc, Midland, TX**

State 22 Water Transfer Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
F1-3'	S	09.16.2020 00:00	3 ft	673099-001
W1	S	09.16.2020 14:08		673099-002
NW1	S	09.16.2020 00:00		673099-003
S1	S	09.16.2020 15:36		673099-004
E1	S	09.16.2020 00:00		673099-005
WW #2	S	09.17.2020 11:10		673099-006
F8-2'	S	09.17.2020 07:52		673099-007
EW #1	S	09.17.2020 14:30		673099-008
F2 @ 4'	S	09.18.2020 08:22	4 ft	673099-009
F4 @ 4'	S	09.18.2020 10:56	4 ft	673099-010
WW3	S	09.18.2020 09:20		673099-011
WW4	S	09.18.2020 09:35		673099-012
NW3	S	09.18.2020 09:13		673099-013

**CASE NARRATIVE****Client Name: Etech Environmental & Safety Solution, Inc****Project Name: State 22 Water Transfer Line**Project ID: 12538
Work Order Number(s): 673099Report Date: 09.22.2020
Date Received: 09.21.2020**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3137732 BTEX by EPA 8021B

Lab Sample ID 673099-009 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Toluene recovered below QC limits in the Matrix Spike. Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 673099-009, -010, -011, -012, -013.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 673099-009, -010, -011, -012, -013



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F1-3'** Matrix: Soil Date Received: 09.21.2020 00:00
 Lab Sample Id: 673099-001 Date Collected: 09.16.2020 00:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.21.2020 13:04 Basis: Wet Weight
 Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	380	4.98	mg/kg	09.21.2020 15:48		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.21.2020 12:00 Basis: Wet Weight
 Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.21.2020 13:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.21.2020 13:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.21.2020 13:24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.21.2020 13:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	09.21.2020 13:24	
o-Terphenyl	84-15-1	85	%	70-130	09.21.2020 13:24	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F1-3'**
Lab Sample Id: 673099-001

Matrix: Soil
Date Collected: 09.16.2020 00:00

Date Received: 09.21.2020 00:00
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 09:30

Basis: Wet Weight

Seq Number: 3137719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.21.2020 18:01	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.21.2020 18:01	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.21.2020 18:01	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.21.2020 18:01	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.21.2020 18:01	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.21.2020 18:01	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.21.2020 18:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	09.21.2020 18:01	
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.21.2020 18:01	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **W1** Matrix: Soil Date Received: 09.21.2020 00:00
 Lab Sample Id: 673099-002 Date Collected: 09.16.2020 14:08
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.21.2020 13:04 Basis: Wet Weight
 Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	172	5.00	mg/kg	09.21.2020 16:04		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.21.2020 12:00 Basis: Wet Weight
 Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.21.2020 14:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.21.2020 14:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.21.2020 14:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.21.2020 14:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	09.21.2020 14:22	
o-Terphenyl	84-15-1	80	%	70-130	09.21.2020 14:22	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **W1**
Lab Sample Id: 673099-002

Matrix: Soil
Date Collected: 09.16.2020 14:08

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 09:30

Basis: Wet Weight

Seq Number: 3137719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.21.2020 18:22	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.21.2020 18:22	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.21.2020 18:22	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.21.2020 18:22	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.21.2020 18:22	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.21.2020 18:22	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.21.2020 18:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	09.21.2020 18:22		
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.21.2020 18:22		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX State 22 Water Transfer Line

Sample Id: **NW1** Matrix: Soil Date Received: 09.21.2020 00:00
 Lab Sample Id: 673099-003 Date Collected: 09.16.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.21.2020 13:04 Basis: Wet Weight
 Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	119	5.04	mg/kg	09.21.2020 16:09		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.21.2020 12:00 Basis: Wet Weight
 Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.21.2020 14:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.21.2020 14:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.21.2020 14:42	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.21.2020 14:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	09.21.2020 14:42	
o-Terphenyl	84-15-1	80	%	70-130	09.21.2020 14:42	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **NW1**
Lab Sample Id: 673099-003

Matrix: Soil
Date Collected: 09.16.2020 00:00

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 09:30

Basis: Wet Weight

Seq Number: 3137719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.21.2020 18:42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.21.2020 18:42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.21.2020 18:42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.21.2020 18:42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.21.2020 18:42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.21.2020 18:42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.21.2020 18:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.21.2020 18:42	
4-Bromofluorobenzene	460-00-4	98	%	70-130	09.21.2020 18:42	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **S1** Matrix: **Soil** Date Received: 09.21.2020 00:00
 Lab Sample Id: 673099-004 Date Collected: 09.16.2020 15:36
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: **CHE** % Moisture:
 Analyst: **CHE** Date Prep: 09.21.2020 13:04 Basis: **Wet Weight**
 Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	150	4.98	mg/kg	09.21.2020 16:15		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: **DVM** % Moisture:
 Analyst: **ARM** Date Prep: 09.21.2020 12:00 Basis: **Wet Weight**
 Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.21.2020 15:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.21.2020 15:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.21.2020 15:02	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.21.2020 15:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	09.21.2020 15:02	
o-Terphenyl	84-15-1	86	%	70-130	09.21.2020 15:02	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: S1
Lab Sample Id: 673099-004

Matrix: Soil
Date Collected: 09.16.2020 15:36

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 09:30

Basis: Wet Weight

Seq Number: 3137719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.21.2020 19:03	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.21.2020 19:03	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.21.2020 19:03	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.21.2020 19:03	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.21.2020 19:03	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.21.2020 19:03	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.21.2020 19:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	09.21.2020 19:03		
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.21.2020 19:03		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: E1 Matrix: Soil Date Received: 09.21.2020 00:00
 Lab Sample Id: 673099-005 Date Collected: 09.16.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.21.2020 13:04 Basis: Wet Weight
 Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	364	24.8	mg/kg	09.21.2020 16:20		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.21.2020 12:00 Basis: Wet Weight
 Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.21.2020 15:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	81.4	50.0	mg/kg	09.21.2020 15:21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.21.2020 15:21	U	1
Total TPH	PHC635	81.4	50.0	mg/kg	09.21.2020 15:21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-130	09.21.2020 15:21	
o-Terphenyl	84-15-1	78	%	70-130	09.21.2020 15:21	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: E1
Lab Sample Id: 673099-005

Matrix: Soil
Date Collected: 09.16.2020 00:00

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 09:30

Basis: Wet Weight

Seq Number: 3137719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.21.2020 19:23	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.21.2020 19:23	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.21.2020 19:23	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.21.2020 19:23	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.21.2020 19:23	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.21.2020 19:23	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.21.2020 19:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	09.21.2020 19:23		
1,4-Difluorobenzene	540-36-3	106	%	70-130	09.21.2020 19:23		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW #2**
Lab Sample Id: 673099-006

Matrix: Soil
Date Collected: 09.17.2020 11:10

Date Received: 09.21.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.21.2020 13:04

Basis: Wet Weight

Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	127	4.99	mg/kg	09.21.2020 16:36		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.21.2020 12:00

Basis: Wet Weight

Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.21.2020 15:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.21.2020 15:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.21.2020 15:41	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.21.2020 15:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	09.21.2020 15:41	
o-Terphenyl	84-15-1	84	%	70-130	09.21.2020 15:41	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW #2**
 Lab Sample Id: 673099-006

Matrix: Soil
 Date Collected: 09.17.2020 11:10

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 09:30

Basis: Wet Weight

Seq Number: 3137719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.21.2020 19:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.21.2020 19:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.21.2020 19:44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.21.2020 19:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.21.2020 19:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.21.2020 19:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.21.2020 19:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.21.2020 19:44		
4-Bromofluorobenzene	460-00-4	101	%	70-130	09.21.2020 19:44		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F8-2'**
Lab Sample Id: 673099-007

Matrix: Soil
Date Collected: 09.17.2020 07:52

Date Received: 09.21.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.21.2020 13:04

Basis: Wet Weight

Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.8	4.98	mg/kg	09.21.2020 16:41		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.21.2020 12:00

Basis: Wet Weight

Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.21.2020 16:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.21.2020 16:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.21.2020 16:01	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.21.2020 16:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	09.21.2020 16:01	
o-Terphenyl	84-15-1	79	%	70-130	09.21.2020 16:01	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F8-2'**
Lab Sample Id: 673099-007

Matrix: Soil
Date Collected: 09.17.2020 07:52

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 09:30

Basis: Wet Weight

Seq Number: 3137719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.21.2020 20:04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.21.2020 20:04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.21.2020 20:04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.21.2020 20:04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.21.2020 20:04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.21.2020 20:04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.21.2020 20:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.21.2020 20:04		
4-Bromofluorobenzene	460-00-4	120	%	70-130	09.21.2020 20:04		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **EW #1** Matrix: Soil Date Received: 09.21.2020 00:00
 Lab Sample Id: 673099-008 Date Collected: 09.17.2020 14:30
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.21.2020 13:04 Basis: Wet Weight
 Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	253	4.96	mg/kg	09.21.2020 16:46		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.21.2020 12:00 Basis: Wet Weight
 Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.21.2020 16:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.21.2020 16:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.21.2020 16:21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.21.2020 16:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-130	09.21.2020 16:21	
o-Terphenyl	84-15-1	85	%	70-130	09.21.2020 16:21	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **EW #1**
Lab Sample Id: 673099-008

Matrix: Soil
Date Collected: 09.17.2020 14:30

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 09:30

Basis: Wet Weight

Seq Number: 3137719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.21.2020 20:25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.21.2020 20:25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.21.2020 20:25	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.21.2020 20:25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.21.2020 20:25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.21.2020 20:25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.21.2020 20:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.21.2020 20:25		
4-Bromofluorobenzene	460-00-4	112	%	70-130	09.21.2020 20:25		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F2 @ 4'** Matrix: **Soil** Date Received: 09.21.2020 00:00
 Lab Sample Id: 673099-009 Date Collected: 09.18.2020 08:22 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: **CHE** % Moisture:
 Analyst: **CHE** Date Prep: 09.21.2020 13:04 Basis: **Wet Weight**
 Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.1	4.97	mg/kg	09.21.2020 16:52		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: **DVM** % Moisture:
 Analyst: **ARM** Date Prep: 09.21.2020 12:00 Basis: **Wet Weight**
 Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.21.2020 16:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.21.2020 16:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.21.2020 16:40	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.21.2020 16:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-130	09.21.2020 16:40	
o-Terphenyl	84-15-1	80	%	70-130	09.21.2020 16:40	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F2 @ 4'**
 Lab Sample Id: 673099-009

Matrix: Soil
 Date Collected: 09.18.2020 08:22

Date Received: 09.21.2020 00:00
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 09:30

Basis: Wet Weight

Seq Number: 3137732

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.21.2020 13:19	UXF	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.21.2020 13:19	UXF	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.21.2020 13:19	UXF	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.21.2020 13:19	UXF	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.21.2020 13:19	UXF	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.21.2020 13:19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.21.2020 13:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.21.2020 13:19		
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.21.2020 13:19		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F4 @ 4'** Matrix: Soil Date Received: 09.21.2020 00:00
 Lab Sample Id: 673099-010 Date Collected: 09.18.2020 10:56 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.21.2020 13:04 Basis: Wet Weight
 Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5560	50.2	mg/kg	09.21.2020 16:57		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.21.2020 12:00 Basis: Wet Weight
 Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.21.2020 17:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.21.2020 17:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.21.2020 17:00	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.21.2020 17:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-130	09.21.2020 17:00	
o-Terphenyl	84-15-1	84	%	70-130	09.21.2020 17:00	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F4 @ 4'**
 Lab Sample Id: 673099-010

Matrix: Soil
 Date Collected: 09.18.2020 10:56

Date Received: 09.21.2020 00:00
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 11:00

Basis: Wet Weight

Seq Number: 3137732

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.21.2020 13:40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.21.2020 13:40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.21.2020 13:40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.21.2020 13:40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.21.2020 13:40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.21.2020 13:40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.21.2020 13:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.21.2020 13:40		
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.21.2020 13:40		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW3**
Lab Sample Id: 673099-011

Matrix: Soil
Date Collected: 09.18.2020 09:20

Date Received: 09.21.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.21.2020 13:04

Basis: Wet Weight

Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	61.3	5.00	mg/kg	09.21.2020 17:02		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.21.2020 12:00

Basis: Wet Weight

Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.21.2020 17:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.21.2020 17:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.21.2020 17:39	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.21.2020 17:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	09.21.2020 17:39	
o-Terphenyl	84-15-1	83	%	70-130	09.21.2020 17:39	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW3**
Lab Sample Id: 673099-011

Matrix: Soil
Date Collected: 09.18.2020 09:20

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 11:00

Basis: Wet Weight

Seq Number: 3137732

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.21.2020 14:00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.21.2020 14:00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.21.2020 14:00	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.21.2020 14:00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.21.2020 14:00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.21.2020 14:00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.21.2020 14:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.21.2020 14:00		
4-Bromofluorobenzene	460-00-4	109	%	70-130	09.21.2020 14:00		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW4**
Lab Sample Id: 673099-012

Matrix: Soil
Date Collected: 09.18.2020 09:35

Date Received: 09.21.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.21.2020 13:04

Basis: Wet Weight

Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.2	4.99	mg/kg	09.21.2020 17:18		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.21.2020 12:00

Basis: Wet Weight

Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.21.2020 17:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.21.2020 17:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.21.2020 17:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.21.2020 17:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-130	09.21.2020 17:59	
o-Terphenyl	84-15-1	77	%	70-130	09.21.2020 17:59	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW4**
Lab Sample Id: 673099-012

Matrix: Soil
Date Collected: 09.18.2020 09:35

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 11:00

Basis: Wet Weight

Seq Number: 3137732

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.21.2020 14:21	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.21.2020 14:21	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.21.2020 14:21	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.21.2020 14:21	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.21.2020 14:21	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.21.2020 14:21	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.21.2020 14:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.21.2020 14:21		
1,4-Difluorobenzene	540-36-3	97	%	70-130	09.21.2020 14:21		



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX State 22 Water Transfer Line

Sample Id: **NW3** Matrix: Soil Date Received: 09.21.2020 00:00
 Lab Sample Id: 673099-013 Date Collected: 09.18.2020 09:13
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.21.2020 13:04 Basis: Wet Weight
 Seq Number: 3137724

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.3	5.04	mg/kg	09.21.2020 17:23		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.21.2020 12:00 Basis: Wet Weight
 Seq Number: 3137762

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.21.2020 18:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.21.2020 18:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.21.2020 18:19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.21.2020 18:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	09.21.2020 18:19	
o-Terphenyl	84-15-1	76	%	70-130	09.21.2020 18:19	



Certificate of Analytical Results 673099

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **NW3**
Lab Sample Id: 673099-013

Matrix: Soil
Date Collected: 09.18.2020 09:13

Date Received: 09.21.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 09.21.2020 11:00

Basis: Wet Weight

Seq Number: 3137732

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.21.2020 14:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.21.2020 14:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.21.2020 14:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.21.2020 14:41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.21.2020 14:41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.21.2020 14:41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.21.2020 14:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	09.21.2020 14:41		
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.21.2020 14:41		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: Chloride by EPA 300

Seq Number: 3137724

MB Sample Id: 7711742-1-BLK

Matrix: Solid

LCS Sample Id: 7711742-1-BKS

Prep Method: E300P

Date Prep: 09.21.2020

LCSD Sample Id: 7711742-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	261	104	261	104	90-110	0	20	mg/kg	09.21.2020 15:38	

Analytical Method: Chloride by EPA 300

Seq Number: 3137724

Parent Sample Id: 673099-001

Matrix: Soil

MS Sample Id: 673099-001 S

Prep Method: E300P

Date Prep: 09.21.2020

MSD Sample Id: 673099-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	380	249	624	98	622	97	90-110	0	20	mg/kg	09.21.2020 15:54	

Analytical Method: Chloride by EPA 300

Seq Number: 3137724

Parent Sample Id: 673099-011

Matrix: Soil

MS Sample Id: 673099-011 S

Prep Method: E300P

Date Prep: 09.21.2020

MSD Sample Id: 673099-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	61.3	250	324	105	323	105	90-110	0	20	mg/kg	09.21.2020 17:07	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137762

MB Sample Id: 7711781-1-BLK

Matrix: Solid

LCS Sample Id: 7711781-1-BKS

Prep Method: SW8015P

Date Prep: 09.21.2020

LCSD Sample Id: 7711781-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	841	84	860	86	70-130	2	20	mg/kg	09.21.2020 12:45	
Diesel Range Organics (DRO)	<50.0	1000	887	89	910	91	70-130	3	20	mg/kg	09.21.2020 12:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	71		80		86		70-130	%	09.21.2020 12:45
o-Terphenyl	82		87		90		70-130	%	09.21.2020 12:45

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137762

Matrix: Solid

MB Sample Id: 7711781-1-BLK

Prep Method: SW8015P

Date Prep: 09.21.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.21.2020 12:26	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3137762

Parent Sample Id: 673099-001

Matrix: Soil

MS Sample Id: 673099-001 S

Prep Method: SW8015P

Date Prep: 09.21.2020

MSD Sample Id: 673099-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	851	85	846	85	70-130	1	20	mg/kg	09.21.2020 13:43	
Diesel Range Organics (DRO)	<49.9	997	836	84	828	83	70-130	1	20	mg/kg	09.21.2020 13:43	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		91		70-130	%	09.21.2020 13:43
o-Terphenyl	90		90		70-130	%	09.21.2020 13:43

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137719

MB Sample Id: 7711794-1-BLK

Matrix: Solid

LCS Sample Id: 7711794-1-BKS

Prep Method: SW5035A

Date Prep: 09.21.2020

LCSD Sample Id: 7711794-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0958	96	0.100	100	70-130	4	35	mg/kg	09.21.2020 09:28	
Toluene	<0.00200	0.100	0.105	105	0.108	108	70-130	3	35	mg/kg	09.21.2020 09:28	
Ethylbenzene	<0.00200	0.100	0.115	115	0.114	114	70-130	1	35	mg/kg	09.21.2020 09:28	
m,p-Xylenes	<0.00400	0.200	0.234	117	0.229	115	70-130	2	35	mg/kg	09.21.2020 09:28	
o-Xylene	<0.00200	0.100	0.113	113	0.112	112	70-130	1	35	mg/kg	09.21.2020 09:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		99		101		70-130	%	09.21.2020 09:28
4-Bromofluorobenzene	79		116		110		70-130	%	09.21.2020 09:28

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137732

MB Sample Id: 7711800-1-BLK

Matrix: Solid

LCS Sample Id: 7711800-1-BKS

Prep Method: SW5035A

Date Prep: 09.21.2020

LCSD Sample Id: 7711800-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0762	76	0.0780	78	70-130	2	35	mg/kg	09.21.2020 10:07	
Toluene	<0.00200	0.100	0.0882	88	0.0909	91	70-130	3	35	mg/kg	09.21.2020 10:07	
Ethylbenzene	<0.00200	0.100	0.0822	82	0.0849	85	70-130	3	35	mg/kg	09.21.2020 10:07	
m,p-Xylenes	<0.00400	0.200	0.162	81	0.169	85	70-130	4	35	mg/kg	09.21.2020 10:07	
o-Xylene	<0.00200	0.100	0.0822	82	0.0856	86	70-130	4	35	mg/kg	09.21.2020 10:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		97		95		70-130	%	09.21.2020 10:07
4-Bromofluorobenzene	100		98		99		70-130	%	09.21.2020 10:07

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137719

Parent Sample Id: 672761-002

Matrix: Soil

MS Sample Id: 672761-002 S

Prep Method: SW5035A

Date Prep: 09.21.2020

MSD Sample Id: 672761-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0488	49	0.0583	59	70-130	18	35	mg/kg	09.21.2020 10:09	X
Toluene	0.00263	0.0996	0.0431	41	0.0555	53	70-130	25	35	mg/kg	09.21.2020 10:09	X
Ethylbenzene	0.00395	0.0996	0.0388	35	0.0506	47	70-130	26	35	mg/kg	09.21.2020 10:09	X
m,p-Xylenes	0.0136	0.199	0.0763	32	0.102	44	70-130	29	35	mg/kg	09.21.2020 10:09	X
o-Xylene	0.00813	0.0996	0.0373	29	0.0507	43	70-130	30	35	mg/kg	09.21.2020 10:09	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		105		70-130	%	09.21.2020 10:09
4-Bromofluorobenzene	85		109		70-130	%	09.21.2020 10:09

Analytical Method: BTEX by EPA 8021B

Seq Number: 3137732

Parent Sample Id: 673099-009

Matrix: Soil

MS Sample Id: 673099-009 S

Prep Method: SW5035A

Date Prep: 09.21.2020

MSD Sample Id: 673099-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0428	43	0.0786	79	70-130	59	35	mg/kg	09.21.2020 11:39	XF
Toluene	<0.00200	0.0998	0.0391	39	0.0812	82	70-130	70	35	mg/kg	09.21.2020 11:39	XF
Ethylbenzene	<0.00200	0.0998	0.0354	35	0.0678	68	70-130	63	35	mg/kg	09.21.2020 11:39	XF
m,p-Xylenes	<0.00399	0.200	0.0708	35	0.134	68	70-130	62	35	mg/kg	09.21.2020 11:39	XF
o-Xylene	<0.00200	0.0998	0.0350	35	0.0667	67	70-130	62	35	mg/kg	09.21.2020 11:39	XF

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		97		70-130	%	09.21.2020 11:39
4-Bromofluorobenzene	99		102		70-130	%	09.21.2020 11:39

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Revised Date 10/4/19 Rev. 2019.1



Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 09.21.2020 12.00.00 AM

Work Order #: 673099

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 09.21.2020

Checklist reviewed by:



Jessica Kramer

Date: 09.21.2020

Certificate of Analysis Summary 673493

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Thu 09.24.2020 12:20
Report Date: 09.28.2020 13:43
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	673493-001	673493-002				
	Field Id:	NW2	SW4				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	09.21.2020 15:07	09.21.2020 14:24				
BTEX by EPA 8021B	Extracted:	09.25.2020 15:39	09.25.2020 15:39				
	Analyzed:	09.26.2020 07:48	09.26.2020 08:11				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00200 0.00200	<0.00200 0.00200				
Toluene		<0.00200 0.00200	<0.00200 0.00200				
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200				
m,p-Xylenes		<0.00399 0.00399	<0.00401 0.00401				
o-Xylene		<0.00200 0.00200	<0.00200 0.00200				
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200				
Total BTEX		<0.00200 0.00200	<0.00200 0.00200				
Chloride by EPA 300	Extracted:	09.24.2020 16:44	09.24.2020 16:44				
	Analyzed:	09.24.2020 23:24	09.24.2020 23:30				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		80.0 10.1	25.4 10.1				
TPH By SW8015 Mod	Extracted:	09.25.2020 10:30	09.25.2020 12:00				
	Analyzed:	09.25.2020 11:00	09.25.2020 15:22				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.1 50.1				
Diesel Range Organics (DRO)		<50.2 50.2	<50.1 50.1				
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.1 50.1				
Total TPH		<50.2 50.2	<50.1 50.1				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico





Analytical Report 673493

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

State 22 Water Transfer Line

12538

09.28.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.28.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **673493**

State 22 Water Transfer Line

Project Address: Rural Chavez

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 673493. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 673493 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 673493

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NW2	S	09.21.2020 15:07		673493-001
SW4	S	09.21.2020 14:24		673493-002



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: State 22 Water Transfer Line

Project ID: 12538
Work Order Number(s): 673493

Report Date: 09.28.2020
Date Received: 09.24.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 673493

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **NW2**
Lab Sample Id: 673493-001

Matrix: Soil
Date Collected: 09.21.2020 15:07

Date Received: 09.24.2020 12:20

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.24.2020 16:44

Basis: Wet Weight

Seq Number: 3138103

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	80.0	10.1	mg/kg	09.24.2020 23:24		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 09.25.2020 10:30

Basis: Wet Weight

Seq Number: 3138163

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.25.2020 11:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.25.2020 11:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.25.2020 11:00	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.25.2020 11:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	09.25.2020 11:00	
o-Terphenyl	84-15-1	118	%	70-135	09.25.2020 11:00	



Certificate of Analytical Results 673493

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **NW2**
 Lab Sample Id: 673493-001

Matrix: Soil
 Date Collected: 09.21.2020 15:07

Date Received: 09.24.2020 12:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.26.2020 07:48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.26.2020 07:48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.26.2020 07:48	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.26.2020 07:48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.26.2020 07:48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.26.2020 07:48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.26.2020 07:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.26.2020 07:48		
4-Bromofluorobenzene	460-00-4	117	%	70-130	09.26.2020 07:48		



Certificate of Analytical Results 673493

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **SW4**
Lab Sample Id: 673493-002

Matrix: Soil
Date Collected: 09.21.2020 14:24

Date Received: 09.24.2020 12:20

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.24.2020 16:44

Basis: Wet Weight

Seq Number: 3138103

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.4	10.1	mg/kg	09.24.2020 23:30		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 09.25.2020 12:00

Basis: Wet Weight

Seq Number: 3138163

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	09.25.2020 15:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	09.25.2020 15:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	09.25.2020 15:22	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	09.25.2020 15:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	09.25.2020 15:22	
o-Terphenyl	84-15-1	115	%	70-135	09.25.2020 15:22	



Certificate of Analytical Results 673493

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **SW4**
Lab Sample Id: 673493-002

Matrix: Soil
Date Collected: 09.21.2020 14:24

Date Received: 09.24.2020 12:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 09.25.2020 15:39

Basis: Wet Weight

Seq Number: 3138238

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.26.2020 08:11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.26.2020 08:11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.26.2020 08:11	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.26.2020 08:11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.26.2020 08:11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.26.2020 08:11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.26.2020 08:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	128	%	70-130	09.26.2020 08:11		
1,4-Difluorobenzene	540-36-3	86	%	70-130	09.26.2020 08:11		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: Chloride by EPA 300

Seq Number: 3138103

MB Sample Id: 7712045-1-BLK

Matrix: Solid

LCS Sample Id: 7712045-1-BKS

Prep Method: E300P

Date Prep: 09.24.2020

LCSD Sample Id: 7712045-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	256	102	256	102	90-110	0	20	mg/kg	09.24.2020 21:05	

Analytical Method: Chloride by EPA 300

Seq Number: 3138103

Parent Sample Id: 673488-006

Matrix: Soil

MS Sample Id: 673488-006 S

Prep Method: E300P

Date Prep: 09.24.2020

MSD Sample Id: 673488-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1260	199	1450	95	1450	95	90-110	0	20	mg/kg	09.24.2020 21:22	

Analytical Method: Chloride by EPA 300

Seq Number: 3138103

Parent Sample Id: 673488-016

Matrix: Soil

MS Sample Id: 673488-016 S

Prep Method: E300P

Date Prep: 09.24.2020

MSD Sample Id: 673488-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3780	202	4000	109	3970	94	90-110	1	20	mg/kg	09.24.2020 22:40	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3138163

MB Sample Id: 7712083-1-BLK

Matrix: Solid

LCS Sample Id: 7712083-1-BKS

Prep Method: SW8015P

Date Prep: 09.25.2020

LCSD Sample Id: 7712083-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1250	125	974	97	70-135	25	35	mg/kg	09.25.2020 10:19	
Diesel Range Organics (DRO)	<50.0	1000	913	91	956	96	70-135	5	35	mg/kg	09.25.2020 10:19	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		134		133		70-135	%	09.25.2020 10:19
o-Terphenyl	92		126		123		70-135	%	09.25.2020 10:19

Analytical Method: TPH By SW8015 Mod

Seq Number: 3138163

Matrix: Solid

MB Sample Id: 7712083-1-BLK

Prep Method: SW8015P

Date Prep: 09.25.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.25.2020 09:59	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3138163

Parent Sample Id: 673493-001

Matrix: Soil

MS Sample Id: 673493-001 S

Prep Method: SW8015P

Date Prep: 09.25.2020

MSD Sample Id: 673493-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	998	100	981	98	70-135	2	35	mg/kg	09.25.2020 11:19	
Diesel Range Organics (DRO)	<49.8	996	992	100	955	96	70-135	4	35	mg/kg	09.25.2020 11:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	134		130		70-135	%	09.25.2020 11:19
o-Terphenyl	130		125		70-135	%	09.25.2020 11:19

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138238

MB Sample Id: 7712176-1-BLK

Matrix: Solid

LCS Sample Id: 7712176-1-BKS

Prep Method: SW5035A

Date Prep: 09.25.2020

LCSD Sample Id: 7712176-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0987	99	0.103	103	70-130	4	35	mg/kg	09.26.2020 02:44	
Toluene	<0.00200	0.100	0.0947	95	0.0973	97	70-130	3	35	mg/kg	09.26.2020 02:44	
Ethylbenzene	<0.00200	0.100	0.0976	98	0.101	101	71-129	3	35	mg/kg	09.26.2020 02:44	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.201	101	70-135	2	35	mg/kg	09.26.2020 02:44	
o-Xylene	<0.00200	0.100	0.0986	99	0.0988	99	71-133	0	35	mg/kg	09.26.2020 02:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		99		102		70-130	%	09.26.2020 02:44
4-Bromofluorobenzene	115		109		109		70-130	%	09.26.2020 02:44

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138238

Parent Sample Id: 673428-008

Matrix: Soil

MS Sample Id: 673428-008 S

Prep Method: SW5035A

Date Prep: 09.25.2020

MSD Sample Id: 673428-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.105	105	0.0983	98	70-130	7	35	mg/kg	09.26.2020 03:29	
Toluene	<0.00201	0.100	0.0978	98	0.0878	88	70-130	11	35	mg/kg	09.26.2020 03:29	
Ethylbenzene	<0.00201	0.100	0.105	105	0.0900	90	71-129	15	35	mg/kg	09.26.2020 03:29	
m,p-Xylenes	<0.00402	0.201	0.210	104	0.180	90	70-135	15	35	mg/kg	09.26.2020 03:29	
o-Xylene	<0.00201	0.100	0.104	104	0.0904	90	71-133	14	35	mg/kg	09.26.2020 03:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		96		70-130	%	09.26.2020 03:29
4-Bromofluorobenzene	114		111		70-130	%	09.26.2020 03:29

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 673493

www.xenco.com Page 1 of 1

Project Manager:	Lance Crenshaw	Bill to: (if different)	Teffanie Fawks
Company Name:	Etech Environmental and Safety	Company Name:	Endeavor
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to: PM@etechenv.com + Client

Program: UST/PST ☐ PRP ☐ Brownfield ☐ RRD ☐ Superfund ☐
 State of Project:
 Reporting: Level ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐
 Deliverables: EDD ☐ ADaPT ☐ Other:

[illegible]

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11		Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Ti	Sn	U	V	Zn			
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010:		8RCRA		Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U	1631 / 245.1 / 7470 / 7471 : Ha														

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	Relinquished by: (Signature)		Received by: (Signature)		Date/Time
1				9/24/20 12:00	2				
3					4				
5					6				

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 09.24.2020 12.20.00 PM

Work Order #: 673493

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.4
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 09.24.2020

Checklist reviewed by:



Jessica Kramer

Date: 09.25.2020



Certificate of Analysis Summary 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Thu 10.01.2020 11:00
Report Date: 10.05.2020 14:18
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674015-001	674015-002	674015-003	674015-004	674015-005	674015-006
	<i>Field Id:</i>	F5 @ 4'	F6 @ 4'	F10 @ 4'	F11 @ 4'	F12 @ 4'	F13 @ 4'
	<i>Depth:</i>	4- ft	4- ft	4- ft	4- ft	4- ft	4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.29.2020 09:18	09.29.2020 09:21	09.29.2020 09:24	09.29.2020 09:28	09.29.2020 08:40	09.29.2020 08:32
BTEX by EPA 8021B	<i>Extracted:</i>	10.02.2020 17:00	10.02.2020 17:00	10.02.2020 17:00	10.02.2020 17:00	10.02.2020 17:00	10.02.2020 17:00
	<i>Analyzed:</i>	10.03.2020 03:54	10.03.2020 04:14	10.03.2020 04:35	10.03.2020 04:55	10.03.2020 05:16	10.03.2020 05:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399	<0.00398 0.00398	<0.00400 0.00400	<0.00399 0.00399
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	10.01.2020 14:25	10.01.2020 14:25	10.01.2020 14:25	10.01.2020 14:25	10.01.2020 14:25	10.01.2020 14:25
	<i>Analyzed:</i>	10.01.2020 20:21	10.01.2020 20:26	10.01.2020 20:32	10.01.2020 20:38	10.01.2020 20:43	10.01.2020 20:49
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		396 24.8	392 25.1	385 24.8	409 24.8	421 25.0	381 25.2
TPH By SW8015 Mod	<i>Extracted:</i>	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00
	<i>Analyzed:</i>	10.03.2020 00:28	10.03.2020 01:26	10.03.2020 01:45	10.03.2020 02:05	10.03.2020 02:24	10.03.2020 02:43
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.9 49.9
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.9 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Certificate of Analysis Summary 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Thu 10.01.2020 11:00
Report Date: 10.05.2020 14:18
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674015-007	674015-008	674015-009	674015-010	674015-011	674015-012
	<i>Field Id:</i>	F14 @ 2'	F15 @ 2'	F16 @ 2'	F17 @ 2'	F18 @ 2'	F19 @ 2'
	<i>Depth:</i>	2- ft	2- ft	2- ft	2- ft	2- ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.29.2020 08:20	09.29.2020 08:23	09.29.2020 08:28	09.29.2020 08:32	09.29.2020 08:36	09.29.2020 10:02
BTEX by EPA 8021B	<i>Extracted:</i>	10.02.2020 17:00	10.02.2020 17:00	10.02.2020 17:00	10.02.2020 17:00	10.02.2020 17:00	10.02.2020 14:15
	<i>Analyzed:</i>	10.02.2020 23:26	10.03.2020 05:57	10.03.2020 06:17	10.03.2020 06:38	10.03.2020 06:58	10.02.2020 17:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Toluene		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Ethylbenzene		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
m,p-Xylenes		<0.00396 0.00396	<0.00397 0.00397	<0.00399 0.00399	<0.00400 0.00400	<0.00396 0.00396	<0.00397 0.00397
o-Xylene		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Total Xylenes		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Total BTEX		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	10.01.2020 14:25	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00
	<i>Analyzed:</i>	10.01.2020 20:55	10.01.2020 14:28	10.01.2020 14:44	10.01.2020 14:49	10.01.2020 14:54	10.01.2020 15:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		321 4.96	323 4.95	327 5.04	331 4.99	204 4.98	214 4.95
TPH By SW8015 Mod	<i>Extracted:</i>	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00
	<i>Analyzed:</i>	10.03.2020 03:02	10.03.2020 03:22	10.03.2020 03:41	10.03.2020 04:01	10.03.2020 04:39	10.03.2020 04:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer



Certificate of Analysis Summary 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Thu 10.01.2020 11:00
Report Date: 10.05.2020 14:18
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674015-013	674015-014	674015-015	674015-016	674015-017	674015-018
	<i>Field Id:</i>	F20 @ 2'	F21 @ 2'	F22 @ 2'	F23 @ 2'	F24 @ 2'	F25 @ 2'
	<i>Depth:</i>	2- ft	2- ft	2- ft	2- ft	2- ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.29.2020 10:11	09.29.2020 10:16	09.29.2020 10:24	09.29.2020 10:30	09.29.2020 10:39	09.29.2020 10:45
BTEX by EPA 8021B	<i>Extracted:</i>	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15
	<i>Analyzed:</i>	10.02.2020 17:50	10.02.2020 18:11	10.02.2020 18:32	10.02.2020 18:53	10.02.2020 19:13	10.02.2020 19:34
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
m,p-Xylenes		<0.00400 0.00400	<0.00399 0.00399	<0.00398 0.00398	<0.00396 0.00396	<0.00401 0.00401	<0.00403 0.00403
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202
Chloride by EPA 300	<i>Extracted:</i>	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00
	<i>Analyzed:</i>	10.01.2020 15:16	10.01.2020 15:21	10.01.2020 15:26	10.01.2020 15:31	10.01.2020 15:37	10.01.2020 15:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		204 4.97	211 5.04	204 4.95	157 5.03	274 4.96	288 5.00
TPH By SW8015 Mod	<i>Extracted:</i>	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00	10.02.2020 13:00
	<i>Analyzed:</i>	10.03.2020 05:18	10.03.2020 05:38	10.03.2020 05:57	10.03.2020 06:16	10.03.2020 06:35	10.03.2020 06:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8

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Jessica Kramer



Certificate of Analysis Summary 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Thu 10.01.2020 11:00
Report Date: 10.05.2020 14:18
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674015-019	674015-020	674015-021	674015-022	674015-023	674015-024
	<i>Field Id:</i>	F26 @ 2'	F27 @ 2'	F28 @ 2'	F29 @ 2'	F30 @ 2'	F31 @ 2'
	<i>Depth:</i>	2- ft	2- ft	2- ft	2- ft	2- ft	2- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.29.2020 10:51	09.29.2020 10:57	09.29.2020 11:10	09.29.2020 11:19	09.29.2020 11:25	09.29.2020 11:34
BTEX by EPA 8021B	<i>Extracted:</i>	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15
	<i>Analyzed:</i>	10.02.2020 19:55	10.02.2020 20:16	10.02.2020 21:56	10.02.2020 22:17	10.02.2020 22:38	10.02.2020 22:58
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00403 0.00403	<0.00398 0.00398	<0.00399 0.00399	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00
	<i>Analyzed:</i>	10.01.2020 15:58	10.01.2020 16:03	10.01.2020 16:19	10.01.2020 16:24	10.01.2020 16:29	10.01.2020 16:34
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		286 5.04	158 4.99	164 4.95	241 5.04	242 5.00	187 4.97
TPH By SW8015 Mod	<i>Extracted:</i>	10.02.2020 13:00	10.02.2020 13:00	10.03.2020 09:00	10.03.2020 09:00	10.03.2020 09:00	10.03.2020 09:00
	<i>Analyzed:</i>	10.03.2020 07:15	10.03.2020 07:34	10.03.2020 13:58	10.03.2020 15:06	10.03.2020 15:28	10.03.2020 15:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

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Certificate of Analysis Summary 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Thu 10.01.2020 11:00
Report Date: 10.05.2020 14:18
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	674015-025	674015-026	674015-027	674015-028	674015-029	674015-030
	<i>Field Id:</i>	F32 @ 2'	SW6	F7	F9	SW5	EM4
	<i>Depth:</i>	2- ft		4- ft	4- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.29.2020 11:46	09.28.2020 00:00	09.29.2020 09:18	09.25.2020 09:21	09.28.2020 11:38	09.28.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15	10.02.2020 14:15
	<i>Analyzed:</i>	10.02.2020 23:19	10.02.2020 23:40	10.03.2020 00:00	10.02.2020 17:09	10.03.2020 00:21	10.03.2020 00:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201
Toluene		<0.00198 0.00198	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201
Ethylbenzene		<0.00198 0.00198	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201
m,p-Xylenes		<0.00396 0.00396	<0.00398 0.00398	<0.00397 0.00397	<0.00398 0.00398	<0.00402 0.00402	<0.00402 0.00402
o-Xylene		<0.00198 0.00198	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201
Total Xylenes		<0.00198 0.00198	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201
Total BTEX		<0.00198 0.00198	<0.00199 0.00199	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 14:00	10.01.2020 15:40	10.01.2020 15:40	10.01.2020 15:40
	<i>Analyzed:</i>	10.01.2020 16:40	10.01.2020 16:45	10.01.2020 16:50	10.02.2020 12:07	10.02.2020 12:23	10.02.2020 12:28
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		198 5.04	27.4 4.99	11800 49.5	344 X 24.8	26.0 5.02	219 4.99
TPH By SW8015 Mod	<i>Extracted:</i>	10.03.2020 09:00	10.03.2020 09:00	10.03.2020 09:00	10.03.2020 09:00	10.03.2020 09:00	10.03.2020 09:00
	<i>Analyzed:</i>	10.03.2020 16:14	10.03.2020 16:37	10.03.2020 17:00	10.03.2020 17:23	10.03.2020 17:46	10.03.2020 18:09
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	367 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	62.7 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	430 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0

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Certificate of Analysis Summary 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: State 22 Water Transfer Line

Project Id: 12538
Contact: PM
Project Location: Rural Chavez

Date Received in Lab: Thu 10.01.2020 11:00
Report Date: 10.05.2020 14:18
Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 674015-031 Field Id: EW3 Depth: Matrix: SOIL Sampled: 09.25.2020 10:42	Lab Id: 674015-032 Field Id: WW5 Depth: Matrix: SOIL Sampled: 09.28.2020 00:00	Lab Id: 674015-033 Field Id: WW4 Depth: Matrix: SOIL Sampled: 09.25.2020 10:02			
BTEX by EPA 8021B	Extracted: 10.02.2020 14:15 Analyzed: 10.03.2020 01:03 Units/RL: mg/kg RL	Extracted: 10.02.2020 17:00 Analyzed: 10.03.2020 05:06 Units/RL: mg/kg RL	Extracted: 10.03.2020 13:00 Analyzed: 10.04.2020 03:04 Units/RL: mg/kg RL			
Benzene	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199			
Toluene	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199			
Ethylbenzene	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199			
m,p-Xylenes	<0.00398 0.00398	<0.00403 0.00403	<0.00398 0.00398			
o-Xylene	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199			
Total Xylenes	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199			
Total BTEX	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199			
Chloride by EPA 300	Extracted: 10.01.2020 15:40 Analyzed: 10.02.2020 12:33 Units/RL: mg/kg RL	Extracted: 10.01.2020 15:40 Analyzed: 10.02.2020 12:39 Units/RL: mg/kg RL	Extracted: 10.01.2020 15:40 Analyzed: 10.02.2020 12:55 Units/RL: mg/kg RL			
Chloride	214 5.03	497 4.96	70.7 5.04			
TPH By SW8015 Mod	Extracted: 10.03.2020 09:00 Analyzed: 10.03.2020 18:55 Units/RL: mg/kg RL	Extracted: 10.03.2020 09:00 Analyzed: 10.03.2020 19:18 Units/RL: mg/kg RL	Extracted: 10.03.2020 09:00 Analyzed: 10.03.2020 19:41 Units/RL: mg/kg RL			
Gasoline Range Hydrocarbons (GRO)	<50.0 50.0	<49.8 49.8	<50.0 50.0			
Diesel Range Organics (DRO)	<50.0 50.0	<49.8 49.8	<50.0 50.0			
Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0	<49.8 49.8	<50.0 50.0			
Total TPH	<50.0 50.0	<49.8 49.8	<50.0 50.0			

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Analytical Report 674015

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

State 22 Water Transfer Line

12538

10.05.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



10.05.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **674015**

State 22 Water Transfer Line

Project Address: Rural Chavez

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 674015. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 674015 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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 Environment Testing
Xenco

Sample Cross Reference 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
F5 @ 4'	S	09.29.2020 09:18	4 ft	674015-001
F6 @ 4'	S	09.29.2020 09:21	4 ft	674015-002
F10@ 4'	S	09.29.2020 09:24	4 ft	674015-003
F11 @ 4'	S	09.29.2020 09:28	4 ft	674015-004
F12 @ 4'	S	09.29.2020 08:40	4 ft	674015-005
F13 @ 4'	S	09.29.2020 08:32	4 ft	674015-006
F14 @ 2'	S	09.29.2020 08:20	2 ft	674015-007
F15 @ 2'	S	09.29.2020 08:23	2 ft	674015-008
F16 @ 2'	S	09.29.2020 08:28	2 ft	674015-009
F17 @ 2'	S	09.29.2020 08:32	2 ft	674015-010
F18 @ 2'	S	09.29.2020 08:36	2 ft	674015-011
F19 @ 2'	S	09.29.2020 10:02	2 ft	674015-012
F20 @ 2'	S	09.29.2020 10:11	2 ft	674015-013
F21 @ 2'	S	09.29.2020 10:16	2 ft	674015-014
F22 @ 2'	S	09.29.2020 10:24	2 ft	674015-015
F23 @ 2'	S	09.29.2020 10:30	2 ft	674015-016
F24 @ 2'	S	09.29.2020 10:39	2 ft	674015-017
F25 @ 2'	S	09.29.2020 10:45	2 ft	674015-018
F26 @ 2'	S	09.29.2020 10:51	2 ft	674015-019
F27 @ 2'	S	09.29.2020 10:57	2 ft	674015-020
F28 @ 2'	S	09.29.2020 11:10	2 ft	674015-021
F29 @ 2'	S	09.29.2020 11:19	2 ft	674015-022
F30 @ 2'	S	09.29.2020 11:25	2 ft	674015-023
F31 @ 2'	S	09.29.2020 11:34	2 ft	674015-024
F32 @ 2'	S	09.29.2020 11:46	2 ft	674015-025
SW6	S	09.28.2020 00:00	ft	674015-026
F7	S	09.29.2020 09:18	4 ft	674015-027
F9	S	09.25.2020 09:21	4 ft	674015-028
SW5	S	09.28.2020 11:38	ft	674015-029
EM4	S	09.28.2020 00:00	ft	674015-030
EW3	S	09.25.2020 10:42	ft	674015-031
WW5	S	09.28.2020 00:00	ft	674015-032
WW4	S	09.25.2020 10:02	ft	674015-033

**CASE NARRATIVE****Client Name: Etech Environmental & Safety Solution, Inc****Project Name: State 22 Water Transfer Line**Project ID: 12538
Work Order Number(s): 674015Report Date: 10.05.2020
Date Received: 10.01.2020**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3138777 BTEX by EPA 8021B

Lab Sample ID 674015-028 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 674015-012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031.

The Laboratory Control Sample for m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Surrogate 4-Bromofluorobenzene recovered below QC limits. Samples affected are: 7712583-1-BKS,7712583-1-BLK,7712583-1-BSD,674015-028 S,674015-028 SD,674015-016,674015-017,674015-031,674015-019,674015-020,674015-021,674015-022,674015-023,674015-024,674015-025,674015-026,674015-027,674015-029,674015-030,674015-015,674015-014,674015-013,674015-012,674015-028,674015-018.

Batch: LBA-3138778 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Samples affected are: 7712584-1-BKS,7712584-1-BLK,7712584-1-BSD,674034-014 S,674034-014 SD,674015-032.

Batch: LBA-3138780 BTEX by EPA 8021B

Lab Sample ID 674015-007 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Benzene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 674015-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

**CASE NARRATIVE****Client Name: Etech Environmental & Safety Solution, Inc****Project Name: State 22 Water Transfer Line**Project ID: 12538
Work Order Number(s): 674015Report Date: 10.05.2020
Date Received: 10.01.2020

Batch: LBA-3138795 Chloride by EPA 300

Lab Sample ID 674015-028 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 674015-028, -029, -030, -031, -032, -033.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3138818 TPH By SW8015 Mod

Surrogate 1-Chlorooctane recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 674015-007,674015-011,674015-012,674015-014,674015-015,674015-018,674015-019,674015-013.

Batch: LBA-3138823 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 674015-030.



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F5 @ 4' Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-001 Date Collected: 09.29.2020 09:18 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:25 Basis: Wet Weight
 Seq Number: 3138675

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	396	24.8	mg/kg	10.01.2020 20:21		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 00:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 00:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 00:28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 00:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	10.03.2020 00:28	
o-Terphenyl	84-15-1	76	%	70-130	10.03.2020 00:28	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F5 @ 4'
Lab Sample Id: 674015-001

Matrix: Soil
Date Collected: 09.29.2020 09:18

Date Received: 10.01.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.03.2020 03:54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.03.2020 03:54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.03.2020 03:54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.03.2020 03:54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.03.2020 03:54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.03.2020 03:54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.03.2020 03:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.03.2020 03:54		
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.03.2020 03:54		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F6 @ 4'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-002 Date Collected: 09.29.2020 09:21 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:25 Basis: Wet Weight
 Seq Number: 3138675

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	392	25.1	mg/kg	10.01.2020 20:26		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 01:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 01:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 01:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 01:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	10.03.2020 01:26	
o-Terphenyl	84-15-1	74	%	70-130	10.03.2020 01:26	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F6 @ 4'**
Lab Sample Id: 674015-002

Matrix: Soil
Date Collected: 09.29.2020 09:21

Date Received: 10.01.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.03.2020 04:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.03.2020 04:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.03.2020 04:14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.03.2020 04:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.03.2020 04:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.03.2020 04:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.03.2020 04:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.03.2020 04:14	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.03.2020 04:14	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F10@ 4'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-003 Date Collected: 09.29.2020 09:24 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:25 Basis: Wet Weight
 Seq Number: 3138675

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	385	24.8	mg/kg	10.01.2020 20:32		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 01:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 01:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 01:45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 01:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	10.03.2020 01:45	
o-Terphenyl	84-15-1	76	%	70-130	10.03.2020 01:45	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F10@ 4'**
 Lab Sample Id: 674015-003

Matrix: Soil
 Date Collected: 09.29.2020 09:24

Date Received: 10.01.2020 11:00
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.03.2020 04:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.03.2020 04:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.03.2020 04:35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.03.2020 04:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.03.2020 04:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.03.2020 04:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.03.2020 04:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	10.03.2020 04:35	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.03.2020 04:35	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F11 @ 4'**
Lab Sample Id: 674015-004

Matrix: Soil
Date Collected: 09.29.2020 09:28

Date Received: 10.01.2020 11:00
Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300
Tech: SPC
Analyst: CHE
Seq Number: 3138675

Date Prep: 10.01.2020 14:25

Prep Method: E300P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	409	24.8	mg/kg	10.01.2020 20:38		5

Analytical Method: TPH By SW8015 Mod
Tech: DVM
Analyst: ARM
Seq Number: 3138818

Date Prep: 10.02.2020 13:00

Prep Method: SW8015P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.03.2020 02:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.03.2020 02:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.03.2020 02:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.03.2020 02:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	10.03.2020 02:05	
o-Terphenyl	84-15-1	74	%	70-130	10.03.2020 02:05	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F11 @ 4'**
 Lab Sample Id: 674015-004

Matrix: Soil
 Date Collected: 09.29.2020 09:28

Date Received: 10.01.2020 11:00
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.03.2020 04:55	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.03.2020 04:55	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.03.2020 04:55	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.03.2020 04:55	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.03.2020 04:55	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.03.2020 04:55	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.03.2020 04:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.03.2020 04:55		
4-Bromofluorobenzene	460-00-4	108	%	70-130	10.03.2020 04:55		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F12 @ 4'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-005 Date Collected: 09.29.2020 08:40 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:25 Basis: Wet Weight
 Seq Number: 3138675

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	421	25.0	mg/kg	10.01.2020 20:43		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.03.2020 02:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.03.2020 02:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.03.2020 02:24	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.03.2020 02:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	10.03.2020 02:24	
o-Terphenyl	84-15-1	75	%	70-130	10.03.2020 02:24	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F12 @ 4'**
Lab Sample Id: 674015-005

Matrix: Soil
Date Collected: 09.29.2020 08:40

Date Received: 10.01.2020 11:00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.03.2020 05:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.03.2020 05:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.03.2020 05:16	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.03.2020 05:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.03.2020 05:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.03.2020 05:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.03.2020 05:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	10.03.2020 05:16		
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.03.2020 05:16		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F13 @ 4'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-006 Date Collected: 09.29.2020 08:32 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:25 Basis: Wet Weight
 Seq Number: 3138675

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	381	25.2	mg/kg	10.01.2020 20:49		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.03.2020 02:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.03.2020 02:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.03.2020 02:43	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.03.2020 02:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	10.03.2020 02:43	
o-Terphenyl	84-15-1	76	%	70-130	10.03.2020 02:43	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F13 @ 4'**
 Lab Sample Id: 674015-006

Matrix: Soil
 Date Collected: 09.29.2020 08:32

Date Received: 10.01.2020 11:00
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.03.2020 05:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.03.2020 05:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.03.2020 05:36	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.03.2020 05:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.03.2020 05:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.03.2020 05:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.03.2020 05:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.03.2020 05:36		
1,4-Difluorobenzene	540-36-3	96	%	70-130	10.03.2020 05:36		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F14 @ 2'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-007 Date Collected: 09.29.2020 08:20 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:25 Basis: Wet Weight
 Seq Number: 3138675

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	321	4.96	mg/kg	10.01.2020 20:55		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.03.2020 03:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.03.2020 03:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.03.2020 03:02	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.03.2020 03:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	68	%	70-130	10.03.2020 03:02	**
o-Terphenyl	84-15-1	71	%	70-130	10.03.2020 03:02	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F14 @ 2'**
 Lab Sample Id: 674015-007

Matrix: Soil
 Date Collected: 09.29.2020 08:20

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.02.2020 23:26	UX	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.02.2020 23:26	UX	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.02.2020 23:26	UX	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	10.02.2020 23:26	UX	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.02.2020 23:26	UX	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.02.2020 23:26	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.02.2020 23:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	10.02.2020 23:26		
4-Bromofluorobenzene	460-00-4	104	%	70-130	10.02.2020 23:26		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F15 @ 2'
Lab Sample Id: 674015-008

Matrix: Soil
Date Collected: 09.29.2020 08:23

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300
Tech: SPC
Analyst: CHE
Seq Number: 3138673

Date Prep: 10.01.2020 14:00

Prep Method: E300P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	323	4.95	mg/kg	10.01.2020 14:28		1

Analytical Method: TPH By SW8015 Mod
Tech: DVM
Analyst: ARM
Seq Number: 3138818

Date Prep: 10.02.2020 13:00

Prep Method: SW8015P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 03:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 03:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 03:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 03:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	10.03.2020 03:22	
o-Terphenyl	84-15-1	72	%	70-130	10.03.2020 03:22	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F15 @ 2'**
 Lab Sample Id: 674015-008

Matrix: Soil
 Date Collected: 09.29.2020 08:23

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.03.2020 05:57	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.03.2020 05:57	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.03.2020 05:57	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.03.2020 05:57	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.03.2020 05:57	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.03.2020 05:57	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.03.2020 05:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	10.03.2020 05:57		
1,4-Difluorobenzene	540-36-3	98	%	70-130	10.03.2020 05:57		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F16 @ 2'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-009 Date Collected: 09.29.2020 08:28 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	327	5.04	mg/kg	10.01.2020 14:44		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 03:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 03:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 03:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 03:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	10.03.2020 03:41	
o-Terphenyl	84-15-1	73	%	70-130	10.03.2020 03:41	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F16 @ 2'**
Lab Sample Id: 674015-009

Matrix: Soil
Date Collected: 09.29.2020 08:28

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.03.2020 06:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.03.2020 06:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.03.2020 06:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.03.2020 06:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.03.2020 06:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.03.2020 06:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.03.2020 06:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.03.2020 06:17	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.03.2020 06:17	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F17 @ 2'**
Lab Sample Id: 674015-010

Matrix: Soil
Date Collected: 09.29.2020 08:32

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: CHE

Seq Number: 3138673

Date Prep: 10.01.2020 14:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	331	4.99	mg/kg	10.01.2020 14:49		1

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3138818

Date Prep: 10.02.2020 13:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.03.2020 04:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.03.2020 04:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.03.2020 04:01	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.03.2020 04:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-130	10.03.2020 04:01	
o-Terphenyl	84-15-1	77	%	70-130	10.03.2020 04:01	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F17 @ 2'**
Lab Sample Id: 674015-010

Matrix: Soil
Date Collected: 09.29.2020 08:32

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.03.2020 06:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.03.2020 06:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.03.2020 06:38	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.03.2020 06:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.03.2020 06:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.03.2020 06:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.03.2020 06:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	10.03.2020 06:38		
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.03.2020 06:38		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F18 @ 2'**
Lab Sample Id: 674015-011

Matrix: Soil
Date Collected: 09.29.2020 08:36

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: CHE

Seq Number: 3138673

Date Prep: 10.01.2020 14:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	204	4.98	mg/kg	10.01.2020 14:54		1

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3138818

Date Prep: 10.02.2020 13:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.03.2020 04:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.03.2020 04:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.03.2020 04:39	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.03.2020 04:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	69	%	70-130	10.03.2020 04:39	**
o-Terphenyl	84-15-1	72	%	70-130	10.03.2020 04:39	



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Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F18 @ 2'**
Lab Sample Id: 674015-011

Matrix: Soil
Date Collected: 09.29.2020 08:36

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138780

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.03.2020 06:58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.03.2020 06:58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.03.2020 06:58	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	10.03.2020 06:58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.03.2020 06:58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.03.2020 06:58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.03.2020 06:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	10.03.2020 06:58	
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.03.2020 06:58	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F19 @ 2'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-012 Date Collected: 09.29.2020 10:02 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	214	4.95	mg/kg	10.01.2020 15:00		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 04:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 04:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 04:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 04:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	65	%	70-130	10.03.2020 04:59	**
o-Terphenyl	84-15-1	70	%	70-130	10.03.2020 04:59	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F19 @ 2'**
Lab Sample Id: 674015-012

Matrix: Soil
Date Collected: 09.29.2020 10:02

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.02.2020 17:30	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.02.2020 17:30	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.02.2020 17:30	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.02.2020 17:30	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.02.2020 17:30	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.02.2020 17:30	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.02.2020 17:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	10.02.2020 17:30		
1,4-Difluorobenzene	540-36-3	108	%	70-130	10.02.2020 17:30		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F20 @ 2'**
Lab Sample Id: 674015-013

Matrix: Soil
Date Collected: 09.29.2020 10:11

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: CHE

Seq Number: 3138673

Date Prep: 10.01.2020 14:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	204	4.97	mg/kg	10.01.2020 15:16		1

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3138818

Date Prep: 10.02.2020 13:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 05:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 05:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 05:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 05:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	67	%	70-130	10.03.2020 05:18	**
o-Terphenyl	84-15-1	71	%	70-130	10.03.2020 05:18	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F20 @ 2'**
 Lab Sample Id: 674015-013

Matrix: Soil
 Date Collected: 09.29.2020 10:11

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.02.2020 17:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.02.2020 17:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.02.2020 17:50	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.02.2020 17:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.02.2020 17:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.02.2020 17:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.02.2020 17:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	10.02.2020 17:50		
1,4-Difluorobenzene	540-36-3	120	%	70-130	10.02.2020 17:50		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F21 @ 2'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-014 Date Collected: 09.29.2020 10:16 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	211	5.04	mg/kg	10.01.2020 15:21		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.03.2020 05:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.03.2020 05:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.03.2020 05:38	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.03.2020 05:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	66	%	70-130	10.03.2020 05:38	**
o-Terphenyl	84-15-1	70	%	70-130	10.03.2020 05:38	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F21 @ 2'
Lab Sample Id: 674015-014

Matrix: Soil
Date Collected: 09.29.2020 10:16

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.02.2020 18:11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.02.2020 18:11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.02.2020 18:11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.02.2020 18:11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.02.2020 18:11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.02.2020 18:11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.02.2020 18:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	10.02.2020 18:11	
4-Bromofluorobenzene	460-00-4	102	%	70-130	10.02.2020 18:11	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F22 @ 2'
Lab Sample Id: 674015-015

Matrix: Soil
Date Collected: 09.29.2020 10:24

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300
Tech: SPC
Analyst: CHE
Seq Number: 3138673

Date Prep: 10.01.2020 14:00

Prep Method: E300P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	204	4.95	mg/kg	10.01.2020 15:26		1

Analytical Method: TPH By SW8015 Mod
Tech: DVM
Analyst: ARM
Seq Number: 3138818

Date Prep: 10.02.2020 13:00

Prep Method: SW8015P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 05:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 05:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 05:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 05:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	67	%	70-130	10.03.2020 05:57	**
o-Terphenyl	84-15-1	70	%	70-130	10.03.2020 05:57	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F22 @ 2'
Lab Sample Id: 674015-015

Matrix: Soil
Date Collected: 09.29.2020 10:24

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.02.2020 18:32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.02.2020 18:32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.02.2020 18:32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.02.2020 18:32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.02.2020 18:32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.02.2020 18:32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.02.2020 18:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	10.02.2020 18:32		
1,4-Difluorobenzene	540-36-3	114	%	70-130	10.02.2020 18:32		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F23 @ 2'
Lab Sample Id: 674015-016

Matrix: Soil
Date Collected: 09.29.2020 10:30

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: CHE

Seq Number: 3138673

Date Prep: 10.01.2020 14:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	157	5.03	mg/kg	10.01.2020 15:31		1

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3138818

Date Prep: 10.02.2020 13:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 06:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 06:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 06:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 06:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	10.03.2020 06:16	
o-Terphenyl	84-15-1	74	%	70-130	10.03.2020 06:16	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F23 @ 2'**
 Lab Sample Id: 674015-016

Matrix: Soil
 Date Collected: 09.29.2020 10:30

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.02.2020 18:53	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.02.2020 18:53	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.02.2020 18:53	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	10.02.2020 18:53	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.02.2020 18:53	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.02.2020 18:53	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.02.2020 18:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	10.02.2020 18:53	
4-Bromofluorobenzene	460-00-4	117	%	70-130	10.02.2020 18:53	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F24 @ 2'**
Lab Sample Id: 674015-017

Matrix: Soil
Date Collected: 09.29.2020 10:39

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: CHE

Seq Number: 3138673

Date Prep: 10.01.2020 14:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	274	4.96	mg/kg	10.01.2020 15:37		1

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3138818

Date Prep: 10.02.2020 13:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.03.2020 06:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.03.2020 06:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.03.2020 06:35	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.03.2020 06:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	10.03.2020 06:35	
o-Terphenyl	84-15-1	74	%	70-130	10.03.2020 06:35	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F24 @ 2'**
 Lab Sample Id: 674015-017

Matrix: Soil
 Date Collected: 09.29.2020 10:39

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.02.2020 19:13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.02.2020 19:13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.02.2020 19:13	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.02.2020 19:13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.02.2020 19:13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.02.2020 19:13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.02.2020 19:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	10.02.2020 19:13	
1,4-Difluorobenzene	540-36-3	114	%	70-130	10.02.2020 19:13	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F25 @ 2' Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-018 Date Collected: 09.29.2020 10:45 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	288	5.00	mg/kg	10.01.2020 15:42		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.03.2020 06:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.03.2020 06:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.03.2020 06:55	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.03.2020 06:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	67	%	70-130	10.03.2020 06:55	**
o-Terphenyl	84-15-1	70	%	70-130	10.03.2020 06:55	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F25 @ 2'
Lab Sample Id: 674015-018

Matrix: Soil
Date Collected: 09.29.2020 10:45

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.02.2020 19:34	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.02.2020 19:34	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.02.2020 19:34	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.02.2020 19:34	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.02.2020 19:34	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.02.2020 19:34	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.02.2020 19:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	126	%	70-130	10.02.2020 19:34		
1,4-Difluorobenzene	540-36-3	120	%	70-130	10.02.2020 19:34		



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Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F26 @ 2'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-019 Date Collected: 09.29.2020 10:51 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	286	5.04	mg/kg	10.01.2020 15:58		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 07:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 07:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 07:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 07:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	64	%	70-130	10.03.2020 07:15	**
o-Terphenyl	84-15-1	70	%	70-130	10.03.2020 07:15	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F26 @ 2'**
 Lab Sample Id: 674015-019

Matrix: Soil
 Date Collected: 09.29.2020 10:51

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.02.2020 19:55	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.02.2020 19:55	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.02.2020 19:55	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.02.2020 19:55	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.02.2020 19:55	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.02.2020 19:55	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.02.2020 19:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	118	%	70-130	10.02.2020 19:55		
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.02.2020 19:55		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F27 @ 2' Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-020 Date Collected: 09.29.2020 10:57 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	158	4.99	mg/kg	10.01.2020 16:03		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.02.2020 13:00 Basis: Wet Weight
 Seq Number: 3138818

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 07:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 07:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 07:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 07:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	10.03.2020 07:34	
o-Terphenyl	84-15-1	85	%	70-130	10.03.2020 07:34	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F27 @ 2'
Lab Sample Id: 674015-020

Matrix: Soil
Date Collected: 09.29.2020 10:57

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.02.2020 20:16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.02.2020 20:16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.02.2020 20:16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.02.2020 20:16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.02.2020 20:16	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.02.2020 20:16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.02.2020 20:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	10.02.2020 20:16	
4-Bromofluorobenzene	460-00-4	114	%	70-130	10.02.2020 20:16	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F28 @ 2'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-021 Date Collected: 09.29.2020 11:10 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	164	4.95	mg/kg	10.01.2020 16:19		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.03.2020 09:00 Basis: Wet Weight
 Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 13:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 13:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 13:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 13:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	10.03.2020 13:58	
o-Terphenyl	84-15-1	74	%	70-130	10.03.2020 13:58	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F28 @ 2'**
 Lab Sample Id: 674015-021

Matrix: Soil
 Date Collected: 09.29.2020 11:10

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.02.2020 21:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.02.2020 21:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.02.2020 21:56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.02.2020 21:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.02.2020 21:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.02.2020 21:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.02.2020 21:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	10.02.2020 21:56		
1,4-Difluorobenzene	540-36-3	103	%	70-130	10.02.2020 21:56		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F29 @ 2'**
Lab Sample Id: 674015-022

Matrix: Soil
Date Collected: 09.29.2020 11:19

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: CHE

Seq Number: 3138673

Date Prep: 10.01.2020 14:00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	241	5.04	mg/kg	10.01.2020 16:24		1

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3138823

Date Prep: 10.03.2020 09:00

Prep Method: SW8015P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.03.2020 15:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.03.2020 15:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.03.2020 15:06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.03.2020 15:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	10.03.2020 15:06	
o-Terphenyl	84-15-1	72	%	70-130	10.03.2020 15:06	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F29 @ 2'**
 Lab Sample Id: 674015-022

Matrix: Soil
 Date Collected: 09.29.2020 11:19

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.02.2020 22:17	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.02.2020 22:17	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.02.2020 22:17	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.02.2020 22:17	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.02.2020 22:17	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.02.2020 22:17	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.02.2020 22:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	115	%	70-130	10.02.2020 22:17	
4-Bromofluorobenzene	460-00-4	99	%	70-130	10.02.2020 22:17	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F30 @ 2'** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-023 Date Collected: 09.29.2020 11:25 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	242	5.00	mg/kg	10.01.2020 16:29		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.03.2020 09:00 Basis: Wet Weight
 Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.03.2020 15:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.03.2020 15:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.03.2020 15:28	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.03.2020 15:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	10.03.2020 15:28	
o-Terphenyl	84-15-1	73	%	70-130	10.03.2020 15:28	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F30 @ 2'**
 Lab Sample Id: 674015-023

Matrix: Soil
 Date Collected: 09.29.2020 11:25

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.02.2020 22:38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.02.2020 22:38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.02.2020 22:38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.02.2020 22:38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.02.2020 22:38	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.02.2020 22:38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.02.2020 22:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	10.02.2020 22:38		
4-Bromofluorobenzene	460-00-4	102	%	70-130	10.02.2020 22:38		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F31 @ 2'**
Lab Sample Id: 674015-024

Matrix: Soil
Date Collected: 09.29.2020 11:34

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300
Tech: SPC
Analyst: CHE
Seq Number: 3138673

Date Prep: 10.01.2020 14:00

Prep Method: E300P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	187	4.97	mg/kg	10.01.2020 16:34		1

Analytical Method: TPH By SW8015 Mod
Tech: DVM
Analyst: ARM
Seq Number: 3138823

Date Prep: 10.03.2020 09:00

Prep Method: SW8015P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 15:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 15:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 15:51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 15:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	10.03.2020 15:51	
o-Terphenyl	84-15-1	75	%	70-130	10.03.2020 15:51	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F31 @ 2'**
 Lab Sample Id: 674015-024

Matrix: Soil
 Date Collected: 09.29.2020 11:34

Date Received: 10.01.2020 11:00
 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.02.2020 22:58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.02.2020 22:58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.02.2020 22:58	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.02.2020 22:58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.02.2020 22:58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.02.2020 22:58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.02.2020 22:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	10.02.2020 22:58		
1,4-Difluorobenzene	540-36-3	110	%	70-130	10.02.2020 22:58		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F32 @ 2'** Matrix: **Soil** Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-025 Date Collected: 09.29.2020 11:46 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: **SPC** % Moisture:
 Analyst: **CHE** Date Prep: 10.01.2020 14:00 Basis: **Wet Weight**
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	198	5.04	mg/kg	10.01.2020 16:40		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: **DVM** % Moisture:
 Analyst: **ARM** Date Prep: 10.03.2020 09:00 Basis: **Wet Weight**
 Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 16:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 16:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 16:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 16:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	10.03.2020 16:14	
o-Terphenyl	84-15-1	72	%	70-130	10.03.2020 16:14	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F32 @ 2'
Lab Sample Id: 674015-025

Matrix: Soil
Date Collected: 09.29.2020 11:46

Date Received: 10.01.2020 11:00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.02.2020 23:19	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.02.2020 23:19	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.02.2020 23:19	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	10.02.2020 23:19	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.02.2020 23:19	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.02.2020 23:19	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.02.2020 23:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	10.02.2020 23:19		
1,4-Difluorobenzene	540-36-3	113	%	70-130	10.02.2020 23:19		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **SW6** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-026 Date Collected: 09.28.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.4	4.99	mg/kg	10.01.2020 16:45		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.03.2020 09:00 Basis: Wet Weight
 Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 16:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 16:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 16:37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 16:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	10.03.2020 16:37	
o-Terphenyl	84-15-1	71	%	70-130	10.03.2020 16:37	



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Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **SW6**
Lab Sample Id: 674015-026

Matrix: Soil
Date Collected: 09.28.2020 00:00

Date Received: 10.01.2020 11:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.02.2020 23:40	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.02.2020 23:40	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.02.2020 23:40	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.02.2020 23:40	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.02.2020 23:40	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.02.2020 23:40	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.02.2020 23:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	10.02.2020 23:40		
4-Bromofluorobenzene	460-00-4	101	%	70-130	10.02.2020 23:40		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F7 Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-027 Date Collected: 09.29.2020 09:18 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 14:00 Basis: Wet Weight
 Seq Number: 3138673

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11800	49.5	mg/kg	10.01.2020 16:50		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.03.2020 09:00 Basis: Wet Weight
 Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.03.2020 17:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	367	49.9	mg/kg	10.03.2020 17:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	62.7	49.9	mg/kg	10.03.2020 17:00		1
Total TPH	PHC635	430	49.9	mg/kg	10.03.2020 17:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	10.03.2020 17:00	
o-Terphenyl	84-15-1	83	%	70-130	10.03.2020 17:00	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: F7
 Lab Sample Id: 674015-027
 Analytical Method: BTEX by EPA 8021B
 Tech: KTL
 Analyst: KTL
 Seq Number: 3138777

Matrix: Soil
 Date Collected: 09.29.2020 09:18
 Date Prep: 10.02.2020 14:15

Date Received: 10.01.2020 11:00
 Sample Depth: 4 ft
 Prep Method: SW5035A
 % Moisture:
 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	10.03.2020 00:00	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	10.03.2020 00:00	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	10.03.2020 00:00	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	10.03.2020 00:00	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	10.03.2020 00:00	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	10.03.2020 00:00	U	1
Total BTEX		<0.00198	0.00198	mg/kg	10.03.2020 00:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	126	%	70-130	10.03.2020 00:00		
1,4-Difluorobenzene	540-36-3	109	%	70-130	10.03.2020 00:00		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX State 22 Water Transfer Line

Sample Id: **F9** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-028 Date Collected: 09.25.2020 09:21 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 15:40 Basis: Wet Weight
 Seq Number: 3138795

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	344	24.8	mg/kg	10.02.2020 12:07	X	5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.03.2020 09:00 Basis: Wet Weight
 Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 17:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 17:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 17:23	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 17:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	10.03.2020 17:23	
o-Terphenyl	84-15-1	70	%	70-130	10.03.2020 17:23	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **F9** Matrix: **Soil** Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-028 Date Collected: 09.25.2020 09:21 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 10.02.2020 14:15 Basis: Wet Weight
 Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.02.2020 17:09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.02.2020 17:09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.02.2020 17:09	UX	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.02.2020 17:09	UX	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.02.2020 17:09	UX	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.02.2020 17:09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.02.2020 17:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	10.02.2020 17:09		
4-Bromofluorobenzene	460-00-4	108	%	70-130	10.02.2020 17:09		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **SW5** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-029 Date Collected: 09.28.2020 11:38
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 15:40 Basis: Wet Weight
 Seq Number: 3138795

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.0	5.02	mg/kg	10.02.2020 12:23		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.03.2020 09:00 Basis: Wet Weight
 Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.03.2020 17:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.03.2020 17:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.03.2020 17:46	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.03.2020 17:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	10.03.2020 17:46	
o-Terphenyl	84-15-1	70	%	70-130	10.03.2020 17:46	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **SW5**
Lab Sample Id: 674015-029

Matrix: Soil
Date Collected: 09.28.2020 11:38

Date Received: 10.01.2020 11:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.03.2020 00:21	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.03.2020 00:21	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.03.2020 00:21	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.03.2020 00:21	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.03.2020 00:21	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.03.2020 00:21	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.03.2020 00:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.03.2020 00:21	
1,4-Difluorobenzene	540-36-3	122	%	70-130	10.03.2020 00:21	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **EM4**
Lab Sample Id: 674015-030

Matrix: Soil
Date Collected: 09.28.2020 00:00

Date Received: 10.01.2020 11:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.01.2020 15:40

Basis: Wet Weight

Seq Number: 3138795

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	219	4.99	mg/kg	10.02.2020 12:28		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 10.03.2020 09:00

Basis: Wet Weight

Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 18:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 18:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 18:09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 18:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	10.03.2020 18:09	
o-Terphenyl	84-15-1	69	%	70-130	10.03.2020 18:09	**



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **EM4**
Lab Sample Id: 674015-030

Matrix: Soil
Date Collected: 09.28.2020 00:00

Date Received: 10.01.2020 11:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.03.2020 00:42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.03.2020 00:42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.03.2020 00:42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.03.2020 00:42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.03.2020 00:42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.03.2020 00:42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.03.2020 00:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.03.2020 00:42		
1,4-Difluorobenzene	540-36-3	117	%	70-130	10.03.2020 00:42		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **EW3**
Lab Sample Id: 674015-031

Matrix: Soil
Date Collected: 09.25.2020 10:42

Date Received: 10.01.2020 11:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.01.2020 15:40

Basis: Wet Weight

Seq Number: 3138795

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	214	5.03	mg/kg	10.02.2020 12:33		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 10.03.2020 09:00

Basis: Wet Weight

Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 18:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 18:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 18:55	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 18:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	10.03.2020 18:55	
o-Terphenyl	84-15-1	73	%	70-130	10.03.2020 18:55	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **EW3**
Lab Sample Id: 674015-031

Matrix: Soil
Date Collected: 09.25.2020 10:42

Date Received: 10.01.2020 11:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 14:15

Basis: Wet Weight

Seq Number: 3138777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.03.2020 01:03	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.03.2020 01:03	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.03.2020 01:03	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.03.2020 01:03	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.03.2020 01:03	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.03.2020 01:03	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.03.2020 01:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.03.2020 01:03		
1,4-Difluorobenzene	540-36-3	119	%	70-130	10.03.2020 01:03		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW5** Matrix: Soil Date Received: 10.01.2020 11:00
 Lab Sample Id: 674015-032 Date Collected: 09.28.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 10.01.2020 15:40 Basis: Wet Weight
 Seq Number: 3138795

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	497	4.96	mg/kg	10.02.2020 12:39		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 10.03.2020 09:00 Basis: Wet Weight
 Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.03.2020 19:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.03.2020 19:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.03.2020 19:18	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.03.2020 19:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	10.03.2020 19:18	
o-Terphenyl	84-15-1	77	%	70-130	10.03.2020 19:18	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW5**
Lab Sample Id: 674015-032

Matrix: Soil
Date Collected: 09.28.2020 00:00

Date Received: 10.01.2020 11:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.02.2020 17:00

Basis: Wet Weight

Seq Number: 3138778

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.03.2020 05:06	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.03.2020 05:06	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.03.2020 05:06	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.03.2020 05:06	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.03.2020 05:06	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.03.2020 05:06	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.03.2020 05:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	10.03.2020 05:06		
1,4-Difluorobenzene	540-36-3	113	%	70-130	10.03.2020 05:06		



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW4**
Lab Sample Id: 674015-033

Matrix: Soil
Date Collected: 09.25.2020 10:02

Date Received: 10.01.2020 11:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 10.01.2020 15:40

Basis: Wet Weight

Seq Number: 3138795

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	70.7	5.04	mg/kg	10.02.2020 12:55		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 10.03.2020 09:00

Basis: Wet Weight

Seq Number: 3138823

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.03.2020 19:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.03.2020 19:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.03.2020 19:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.03.2020 19:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	10.03.2020 19:41	
o-Terphenyl	84-15-1	77	%	70-130	10.03.2020 19:41	



Certificate of Analytical Results 674015

Etech Environmental & Safety Solution, Inc, Midland, TX

State 22 Water Transfer Line

Sample Id: **WW4**
Lab Sample Id: 674015-033

Matrix: Soil
Date Collected: 09.25.2020 10:02

Date Received: 10.01.2020 11:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 10.03.2020 13:00

Basis: Wet Weight

Seq Number: 3138789

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.04.2020 03:04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.04.2020 03:04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.04.2020 03:04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.04.2020 03:04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.04.2020 03:04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.04.2020 03:04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.04.2020 03:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.04.2020 03:04		
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.04.2020 03:04		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: Chloride by EPA 300

Seq Number: 3138673

MB Sample Id: 7712458-1-BLK

Matrix: Solid

LCS Sample Id: 7712458-1-BKS

Prep Method: E300P

Date Prep: 10.01.2020

LCSD Sample Id: 7712458-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	257	103	258	103	90-110	0	20	mg/kg	10.01.2020 14:17	

Analytical Method: Chloride by EPA 300

Seq Number: 3138675

MB Sample Id: 7712459-1-BLK

Matrix: Solid

LCS Sample Id: 7712459-1-BKS

Prep Method: E300P

Date Prep: 10.01.2020

LCSD Sample Id: 7712459-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	256	102	251	100	90-110	2	20	mg/kg	10.01.2020 18:11	

Analytical Method: Chloride by EPA 300

Seq Number: 3138795

MB Sample Id: 7712460-1-BLK

Matrix: Solid

LCS Sample Id: 7712460-1-BKS

Prep Method: E300P

Date Prep: 10.01.2020

LCSD Sample Id: 7712460-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	258	103	259	104	90-110	0	20	mg/kg	10.02.2020 11:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3138673

Parent Sample Id: 674015-008

Matrix: Soil

MS Sample Id: 674015-008 S

Prep Method: E300P

Date Prep: 10.01.2020

MSD Sample Id: 674015-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	323	248	567	98	564	97	90-110	1	20	mg/kg	10.01.2020 14:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3138673

Parent Sample Id: 674015-018

Matrix: Soil

MS Sample Id: 674015-018 S

Prep Method: E300P

Date Prep: 10.01.2020

MSD Sample Id: 674015-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	288	250	530	97	531	97	90-110	0	20	mg/kg	10.01.2020 15:47	

Analytical Method: Chloride by EPA 300

Seq Number: 3138675

Parent Sample Id: 673766-001

Matrix: Soil

MS Sample Id: 673766-001 S

Prep Method: E300P

Date Prep: 10.01.2020

MSD Sample Id: 673766-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	688	250	918	92	910	89	90-110	1	20	mg/kg	10.01.2020 18:28	X

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: Chloride by EPA 300

Seq Number: 3138675

Parent Sample Id: 673766-010

Matrix: Soil

MS Sample Id: 673766-010 S

Prep Method: E300P

Date Prep: 10.01.2020

MSD Sample Id: 673766-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1170	252	1360	75	1340	67	90-110	1	20	mg/kg	10.01.2020 19:47	X

Analytical Method: Chloride by EPA 300

Seq Number: 3138795

Parent Sample Id: 674013-005

Matrix: Soil

MS Sample Id: 674013-005 S

Prep Method: E300P

Date Prep: 10.01.2020

MSD Sample Id: 674013-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1840	1500	3390	103	3390	103	90-110	0	20	mg/kg	10.02.2020 13:26	

Analytical Method: Chloride by EPA 300

Seq Number: 3138795

Parent Sample Id: 674015-028

Matrix: Soil

MS Sample Id: 674015-028 S

Prep Method: E300P

Date Prep: 10.01.2020

MSD Sample Id: 674015-028 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	344	1240	1730	112	1730	112	90-110	0	20	mg/kg	10.02.2020 12:12	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3138818

MB Sample Id: 7712596-1-BLK

Matrix: Solid

LCS Sample Id: 7712596-1-BKS

Prep Method: SW8015P

Date Prep: 10.02.2020

LCSD Sample Id: 7712596-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1030	103	990	99	70-130	4	20	mg/kg	10.02.2020 23:49	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	972	97	70-130	4	20	mg/kg	10.02.2020 23:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	75		93		91		70-130	%	10.02.2020 23:49
o-Terphenyl	88		101		94		70-130	%	10.02.2020 23:49

Analytical Method: TPH By SW8015 Mod

Seq Number: 3138823

MB Sample Id: 7712607-1-BLK

Matrix: Solid

LCS Sample Id: 7712607-1-BKS

Prep Method: SW8015P

Date Prep: 10.03.2020

LCSD Sample Id: 7712607-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	963	96	943	94	70-130	2	20	mg/kg	10.03.2020 13:12	
Diesel Range Organics (DRO)	<50.0	1000	930	93	911	91	70-130	2	20	mg/kg	10.03.2020 13:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		93		94		70-130	%	10.03.2020 13:12
o-Terphenyl	89		86		90		70-130	%	10.03.2020 13:12

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: TPH By SW8015 Mod

Seq Number: 3138818

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.02.2020

MB Sample Id: 7712596-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

10.02.2020 23:30

Flag**Analytical Method:** TPH By SW8015 Mod

Seq Number: 3138823

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.03.2020

MB Sample Id: 7712607-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

10.03.2020 12:49

Flag**Analytical Method:** TPH By SW8015 Mod

Seq Number: 3138818

Matrix: Soil

Prep Method: SW8015P

Date Prep: 10.02.2020

Parent Sample Id: 674015-001

MS Sample Id: 674015-001 S

MSD Sample Id: 674015-001 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

**Parent
Result**

<49.9

**Spike
Amount**

997

**MS
Result**

898

**MS
%Rec**

90

**MSD
Result**

909

**MSD
%Rec**

91

Limits

70-130

%RPD

1

**RPD
Limit**

20

Units

mg/kg

**Analysis
Date**

10.03.2020 00:47

Flag

Diesel Range Organics (DRO)

<49.9

997

895

90

903

91

70-130

1

20

mg/kg

10.03.2020 00:47

Surrogate

1-Chlorooctane

**MS
%Rec**

80

**MS
Flag****MSD
%Rec**

83

**MSD
Flag****Limits**

70-130

Units

%

**Analysis
Date**

10.03.2020 00:47

o-Terphenyl

80

82

70-130

%

10.03.2020 00:47

Analytical Method: TPH By SW8015 Mod

Seq Number: 3138823

Matrix: Soil

Prep Method: SW8015P

Date Prep: 10.03.2020

Parent Sample Id: 674015-021

MS Sample Id: 674015-021 S

MSD Sample Id: 674015-021 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

**Parent
Result**

<49.9

**Spike
Amount**

998

**MS
Result**

885

**MS
%Rec**

89

**MSD
Result**

857

**MSD
%Rec**

86

Limits

70-130

%RPD

3

**RPD
Limit**

20

Units

mg/kg

**Analysis
Date**

10.03.2020 14:20

Flag

Diesel Range Organics (DRO)

<49.9

998

894

90

909

91

70-130

2

20

mg/kg

10.03.2020 14:20

Surrogate

1-Chlorooctane

**MS
%Rec**

83

**MS
Flag****MSD
%Rec**

83

**MSD
Flag****Limits**

70-130

Units

%

**Analysis
Date**

10.03.2020 14:20

o-Terphenyl

75

76

70-130

%

10.03.2020 14:20

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138777

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.02.2020

MB Sample Id: 7712583-1-BLK

LCS Sample Id: 7712583-1-BKS

LCSD Sample Id: 7712583-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0884	88	0.101	101	70-130	13	35	mg/kg	10.02.2020 14:33	
Toluene	<0.00200	0.100	0.0838	84	0.0951	95	70-130	13	35	mg/kg	10.02.2020 14:33	
Ethylbenzene	<0.00200	0.100	0.0810	81	0.0927	93	70-130	13	35	mg/kg	10.02.2020 14:33	
m,p-Xylenes	<0.00400	0.200	0.172	86	0.196	98	70-130	13	35	mg/kg	10.02.2020 14:33	
o-Xylene	<0.00200	0.100	0.0832	83	0.0939	94	70-130	12	35	mg/kg	10.02.2020 14:33	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	102		115		114		70-130			%	10.02.2020 14:33	
4-Bromofluorobenzene	93		103		107		70-130			%	10.02.2020 14:33	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138778

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.02.2020

MB Sample Id: 7712584-1-BLK

LCS Sample Id: 7712584-1-BKS

LCSD Sample Id: 7712584-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0926	93	0.0939	94	70-130	1	35	mg/kg	10.03.2020 02:14	
Toluene	<0.00200	0.100	0.0871	87	0.0888	89	70-130	2	35	mg/kg	10.03.2020 02:14	
Ethylbenzene	<0.00200	0.100	0.0832	83	0.0848	85	70-130	2	35	mg/kg	10.03.2020 02:14	
m,p-Xylenes	<0.00400	0.200	0.175	88	0.178	89	70-130	2	35	mg/kg	10.03.2020 02:14	
o-Xylene	<0.00200	0.100	0.0859	86	0.0878	88	70-130	2	35	mg/kg	10.03.2020 02:14	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	100		117		121		70-130			%	10.03.2020 02:14	
4-Bromofluorobenzene	92		102		107		70-130			%	10.03.2020 02:14	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138780

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.02.2020

MB Sample Id: 7712586-1-BLK

LCS Sample Id: 7712586-1-BKS

LCSD Sample Id: 7712586-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.111	111	0.105	105	70-130	6	35	mg/kg	10.02.2020 21:23	
Toluene	<0.00200	0.100	0.103	103	0.0975	98	70-130	5	35	mg/kg	10.02.2020 21:23	
Ethylbenzene	<0.00200	0.100	0.108	108	0.103	103	70-130	5	35	mg/kg	10.02.2020 21:23	
m,p-Xylenes	<0.00400	0.200	0.221	111	0.211	106	70-130	5	35	mg/kg	10.02.2020 21:23	
o-Xylene	<0.00200	0.100	0.109	109	0.104	104	70-130	5	35	mg/kg	10.02.2020 21:23	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	96		100		98		70-130			%	10.02.2020 21:23	
4-Bromofluorobenzene	107		101		99		70-130			%	10.02.2020 21:23	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138789

Matrix: Solid

Prep Method: SW5035A

Date Prep: 10.03.2020

MB Sample Id: 7712591-1-BLK

LCS Sample Id: 7712591-1-BKS

LCSD Sample Id: 7712591-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0985	99	0.0984	98	70-130	0	35	mg/kg	10.03.2020 20:34	
Toluene	<0.00200	0.100	0.0921	92	0.0913	91	70-130	1	35	mg/kg	10.03.2020 20:34	
Ethylbenzene	<0.00200	0.100	0.0975	98	0.0961	96	70-130	1	35	mg/kg	10.03.2020 20:34	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.195	98	70-130	1	35	mg/kg	10.03.2020 20:34	
o-Xylene	<0.00200	0.100	0.0971	97	0.0964	96	70-130	1	35	mg/kg	10.03.2020 20:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		98		98		70-130	%	10.03.2020 20:34
4-Bromofluorobenzene	105		96		95		70-130	%	10.03.2020 20:34

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138777

Matrix: Soil

Prep Method: SW5035A

Date Prep: 10.02.2020

Parent Sample Id: 674015-028

MS Sample Id: 674015-028 S

MSD Sample Id: 674015-028 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0797	79	0.0759	77	70-130	5	35	mg/kg	10.02.2020 15:14	
Toluene	<0.00201	0.101	0.0724	72	0.0702	71	70-130	3	35	mg/kg	10.02.2020 15:14	
Ethylbenzene	<0.00201	0.101	0.0667	66	0.0631	64	70-130	6	35	mg/kg	10.02.2020 15:14	X
m,p-Xylenes	<0.00402	0.201	0.139	69	0.132	67	70-130	5	35	mg/kg	10.02.2020 15:14	X
o-Xylene	<0.00201	0.101	0.0665	66	0.0649	65	70-130	2	35	mg/kg	10.02.2020 15:14	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		115		70-130	%	10.02.2020 15:14
4-Bromofluorobenzene	107		115		70-130	%	10.02.2020 15:14

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138778

Matrix: Soil

Prep Method: SW5035A

Date Prep: 10.02.2020

Parent Sample Id: 674034-014

MS Sample Id: 674034-014 S

MSD Sample Id: 674034-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0579	58	0.0813	82	70-130	34	35	mg/kg	10.03.2020 02:55	X
Toluene	<0.00200	0.0998	0.0550	55	0.0737	74	70-130	29	35	mg/kg	10.03.2020 02:55	X
Ethylbenzene	<0.00200	0.0998	0.0513	51	0.0688	69	70-130	29	35	mg/kg	10.03.2020 02:55	X
m,p-Xylenes	<0.00399	0.200	0.111	56	0.146	73	70-130	27	35	mg/kg	10.03.2020 02:55	X
o-Xylene	<0.00200	0.0998	0.0558	56	0.0729	73	70-130	27	35	mg/kg	10.03.2020 02:55	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	115		122		70-130	%	10.03.2020 02:55
4-Bromofluorobenzene	104		111		70-130	%	10.03.2020 02:55

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Etech Environmental & Safety Solution, Inc

State 22 Water Transfer Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138780

Parent Sample Id: 674015-007

Matrix: Soil

MS Sample Id: 674015-007 S

Prep Method: SW5035A

Date Prep: 10.02.2020

MSD Sample Id: 674015-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0737	74	0.0673	68	70-130	9	35	mg/kg	10.02.2020 22:04	X
Toluene	<0.00199	0.0994	0.0665	67	0.0623	63	70-130	7	35	mg/kg	10.02.2020 22:04	X
Ethylbenzene	<0.00199	0.0994	0.0668	67	0.0644	65	70-130	4	35	mg/kg	10.02.2020 22:04	X
m,p-Xylenes	<0.00398	0.199	0.134	67	0.130	65	70-130	3	35	mg/kg	10.02.2020 22:04	X
o-Xylene	<0.00199	0.0994	0.0652	66	0.0633	64	70-130	3	35	mg/kg	10.02.2020 22:04	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		98		70-130	%	10.02.2020 22:04
4-Bromofluorobenzene	104		105		70-130	%	10.02.2020 22:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3138789

Parent Sample Id: 674215-001

Matrix: Soil

MS Sample Id: 674215-001 S

Prep Method: SW5035A

Date Prep: 10.03.2020

MSD Sample Id: 674215-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0700	70	0.0791	80	70-130	12	35	mg/kg	10.03.2020 21:15	
Toluene	<0.00199	0.0994	0.0698	70	0.0711	72	70-130	2	35	mg/kg	10.03.2020 21:15	
Ethylbenzene	<0.00199	0.0994	0.0531	53	0.0571	58	70-130	7	35	mg/kg	10.03.2020 21:15	X
m,p-Xylenes	<0.00398	0.199	0.114	57	0.122	62	70-130	7	35	mg/kg	10.03.2020 21:15	X
o-Xylene	<0.00199	0.0994	0.0674	68	0.0665	67	70-130	1	35	mg/kg	10.03.2020 21:15	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		99		70-130	%	10.03.2020 21:15
4-Bromofluorobenzene	100		99		70-130	%	10.03.2020 21:15

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
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 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 674015

Project Manager:		Lance Crenshaw		Bill to: (if different)	Teffanie Fawks
Company Name:		Etech Environmental and Safety		Company Name:	Endeavor
Address:		3100 Plains Hwy		Address:	
City, State ZIP:		Lovington, NM, 88260		City, State ZIP:	
Phone:		575-396-2378	Email:	Email Results to: PM@etechenv.com + Client	

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Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfield ☐ RR ☐ Superfund ☐

State of Project:

Reporting: Level ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐

Deliverables: EDD ☐ ADaPT ☐ Other: ☐

Project Name:						State 22 Water Transfer Line									Turn Around			ANALYSIS REQUEST																		Preservative Codes																												
Project Number:						12538									Routine: ☒																					HNO ₃ : HN																												
Project Location						Rural Chavez									Rush: ☐																					H ₂ S0 ₄ : H2																												
Sampler's Name:						Spencer Blackwood									Due Date:																					HCL: HL																												
PO #:																																				None: NO																												
SAMPLE RECEIPT						Temp Blank: Yes No ☒ Wet Ice: Yes No ☒									Number of Containers/Preservative Code																					NaOH: Na																												
Temperature (°C):						2.1 / 2.6												Thermometer ID																					MeOH: Me																									
Received Intact:						Yes No ☒																																	Zn Acetate+ NaOH: Zn																									
Cooler Custody Seals:						Yes No N/A												Correction Factor:																					TAT starts the day received by the lab, if received by 4:30pm																									
Sample Custody Seals:						Yes No N/A												Total Containers:																					Sample Comments																									
F5 @ 4'						Soil									9/29/2020									9:18									4'									1/NO			X	X	X																	
F6 @ 4'						Soil									9/29/2020									9:21									4'									1/NO			X	X	X																	
F10 @ 4'						Soil									9/29/2020									9:24									4'									1/NO			X	X	X																	
F11 @ 4'						Soil									9/29/2020									9:28									4'									1/NO			X	X	X																	
F12 @ 4'						Soil									9/29/2020									8:40									4'									1/NO			X	X	X																	
F13 @ 4'						Soil									9/29/2020									8:32									4'									1/NO			X	X	X																	
F14 @ 2'						Soil									9/29/2020									8:20									2'									1/NO			X	X	X																	
F15 @ 2'						Soil									9/29/2020									8:23									2'									1/NO			X	X	X																	
F16 @ 2'						Soil									9/29/2020									8:28									2'									1/NO			X	X	X																	
F17 @ 2'						Soil									9/29/2020									8:32									2'									1/NO			X	X	X																	
Total 200.7 / 6010						200.8 / 6020																																							X	X	X																	

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

TCLP / SPLP 6010: 8RCRA Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
1		4		9/30	1535
3					
5					

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
2		10		10.1.20	11:00
4					
6					



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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Project Manager:	Lance Crenshaw	Bill to: (if different)	Teffanie Fawks
Company Name:	Etech Environmental and Safety	Company Name:	Endeavor
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to: PM@etechenv.com + Client

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Work Order Comments

Program: ☐ UST/PST ☐ PRP ☐ Brownfield ☐ RR ☐ Superfund ☐

State of Project:

Reporting: Level ☐ Level ☐ PST/US TRF ☐ Level ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:		State 22 Water Transfer Line		Turn Around		ANALYSIS REQUEST																Preservative Codes											
Project Number:		12538		Routine: ☒																		HNO3: HN											
Project Location		Rural Chavez		Rush: ☐																		H2S04: H2											
Sampler's Name:		Spencer Blackwood		Due Date:																		HCL: HL											
PO #:																						None: NO											
SAMPLE RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No																		NaOH: Na							
Temperature (°C):						Thermometer ID																				MeOH: Me							
Received Intact:		Yes No																								Zn Acetate+ NaOH: Zn							
Cooler Custody Seals:		Yes No N/A		Correction Factor:																						TAT starts the day received by the lab, if received by 4:30pm							
Sample Custody Seals:		Yes No N/A		Total Containers:																						Sample Comments							
Sample Identification		Matrix		Date Sampled		Time Sampled		Depth																		Number of Containers/Preservative Code		BTEX (SW 846 8021B)		TPH (SW 846 8015M Ext.)		Cl- (4500 Cl)	
F18 @ 2'		Soil		9/29/2020		8:36		2'																		1/NO		X		X		X	
F19 @ 2'		Soil		9/29/2020		10:02		2'																		1/NO		X		X		X	
F20 @ 2'		Soil		9/29/2020		10:11		2'		1/NO		X		X		X																	
F21 @ 2'		Soil		9/29/2020		10:16		2'		1/NO		X		X		X																	
F22 @ 2'		Soil		9/29/2020		10:24		2'		1/NO		X		X		X																	
F23 @ 2'		Soil		9/29/2020		10:30		2'		1/NO		X		X		X																	
F24 @ 2'		Soil		9/29/2020		10:39		2'		1/NO		X		X		X																	
F25 @ 2'		Soil		9/29/2020		10:45		2'		1/NO		X		X		X																	
F26 @ 2'		Soil		9/29/2020		10:51		2'		1/NO		X		X		X																	
F27 @ 2'		Soil		9/29/2020		10:57		2'		1/NO		X		X		X																	
Total 200.7 / 6010		200.8 / 6020		200.9 / 6030		200.9 / 6040		200.9 / 6050		200.9 / 6060		200.9 / 6070		200.9 / 6080		200.9 / 6090		200.9 / 6100															

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11		Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Sr	Ti	Sn	U	V	Zn			
Circle Method(s) and Metal(s) to be analyzed				TCLP / SPLP 6010:		8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U	1631 / 245.1 / 7470 / 7471 : Ha													

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Relinquished by: (Signature)		Received by: (Signature)		Date/Time	Relinquished by: (Signature)		Received by: (Signature)		Date/Time
1				9-30-1553	2				10-1-20 11:00
3					4				
5					6				



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 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
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Work Order No: 674015

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Project Manager:	Lance Crenshaw	Bill to: (if different)	Teffanie Fawks
Company Name:	Etech Environmental and Safety	Company Name:	Endeavor
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to: <u>PM@etechenv.com</u> + Client

Work Order Comments	
Program:	UST/PST ☐ PRF ☐ Brownfield ☐ RRC ☐ Superfund ☐
State of Project:	
Reporting:	Level ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐
Deliverables:	EDD ☐ ADaPT ☐ Other: ☐

Project Name:		State 22 Water Transfer Line		Turn Around		ANALYSIS REQUEST																Preservative Codes							
Project Number:		12538		Routine:		☒																		HNO3: HN					
Project Location:		Rural Chavez		Rush:		☐																		H2S04: H2					
Sampler's Name:		Spencer Blackwood		Due Date:																				HCL: HL					
PO #:																								None: NO					
SAMPLE RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No																		NaOH: Na			
Temperature (°C):																										MeOH: Me			
Received Intact:		Yes No																								Zn Acetate+ NaOH: Zn			
Cooler Custody Seals:		Yes No N/A		Correction Factor:																						TAT starts the day received by the lab, if received by 4:30pm			
Sample Custody Seals:		Yes No N/A		Total Containers:																						Sample Comments			
Sample Identification		Matrix		Date Sampled		Time Sampled		Depth		Number of Containers/Preservative Code																			
F28 @ 2'		Soil		9/29/2020		11:10		2'		1/NO																			
F29 @ 2'		Soil		9/29/2020		11:19		2'		1/NO																			
F30 @ 2'		Soil		9/29/2020		11:25		2'		1/NO																			
F31 @ 2'		Soil		9/29/2020		11:34		2'		1/NO																			
F32 @ 2'		Soil		9/29/2020		11:46		2'		1/NO																			
SW6		Soil		9/28/2020						1/NO																			
F7		Soil		9/25/2020		9:21		4'		1/NO																			
F9		Soil		9/28/2020				2'		1/NO																			
SW5		Soil		9/28/2020		11:38				1/NO																			
EM4		Soil		9/28/2020						1/NO																			

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$6 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	9-30 1555	<i>[Signature]</i>	<i>[Signature]</i>	10-1-20 11:00



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 674015

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Project Manager:	Lance Crenshaw	Bill to: (if different)	Teffanie Fawks
Company Name:	Etech Environmental and Safety	Company Name:	Endeavor
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to: PM@etechenv.com + Client

www.xenco.com Page 4 of 4
Work Order Comments
 Program: UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐
 State of Project:
 Reporting: Level ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐
 Deliverables: EDD ☐ ADaPT ☐ Other:

[illegible]

Total 200.7 / 6010 200.8 / 6020:

TCLP / SPLP 6010: 8RCRA Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

Notice: Signature of this document and relinquishment of samples constitutes a valid signature. 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
1		2		3	10-30-1555
3		4		5	
5		6		7	

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 10.01.2020 11.00.00 AM

Work Order #: 674015

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.6	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6 *Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	BTEX was in bulk container
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	N/A	
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 10.01.2020

Checklist reviewed by:



Jessica Kramer

Date: 10.01.2020

Appendix D

Photographic Log

Photographic Log

Photo Number: 1	 Jun 8, 2020 at 10:09:50 AM +33.621968,-103.569012 ±5.00m 237° SE
Photo Direction: Southeast	
Photo Description: Spill area adjacent to road.	

Photo Number: 2	 Jun 8, 2020 at 10:14:18 AM +33.622414,-103.569122 ±5.00m 88° E
Photo Direction: East	
Photo Description: Initial release point facing downhill toward the bulk of the release.	

Photographic Log

Photo Number: 3	 Jun 8, 2020 at 10:12:29 AM +33.622349,-103.569044 ±5.00m 185° S
Photo Direction: South	
Photo Description: Pasture area affected by release.	

Photo Number: 4	 Jun 8, 2020 at 10:09:55 AM +33.621968,-103.569012 ±5.00m 283° W
Photo Direction: West	
Photo Description: Release area blocked by fiberglass pipe.	

Photographic Log

Photo Number: 5	 Jun 8, 2020 at 10:11:27 AM +33.622155, -103.569063 ±5.00m 212° SE
Photo Direction: Southeast	
Photo Description: Pasture area affected by release.	

Photo Number: 6	 Jun 8, 2020 at 10:13:29 AM +33.622414, -103.569122 ±5.00m 218° SE
Photo Direction: Southeast	
Photo Description: Runoff downhill from initial release point.	

Photographic Log

Photo Number: 7	 +33.622352,-103.569023 9/28/20, 3:11 PM
Photo Direction: Southwest	
Photo Description: Excavated area.	

Photo Number: 8	 +33.622382,-103.569125 9/28/20, 3:12 PM
Photo Direction: South	
Photo Description: Excavated area.	

Photographic Log

Photo Number: 9	 +33.622294,-103.569153 9/28/20, 3:13 PM
Photo Direction: Northeast	
Photo Description: Excavated area.	

Photo Number: 10	 +33.622310,-103.569064 10/26/20, 11:49 AM
Photo Direction: Southwest	
Photo Description: Release area after backfill and grading.	

Photographic Log

Photo Number: 11	 +33.621660,-103.569226 10/26/20, 11:47 AM
Photo Direction: Northeast	
Photo Description: Release area after backfill and grading.	

Photo Number: 12	 +33.622061,-103.569469 10/26/20, 11:48 AM
Photo Direction: East	
Photo Description: Release area after backfill and grading.	

Photographic Log

Photo Number: 13	 +33.622310,-103.569064 10/26/20, 11:48 AM
Photo Direction: Southwest	
Photo Description: Release area after backfill and grading.	

Photo Number: 14	 +33.622106,-103.569053 10/26/20, 11:49 AM
Photo Direction: Northwest	
Photo Description: Release area after backfill and grading.	



Borehole ID:

Soil Drilling Log

Project Name : Endeavor Tobac GWDB

Project No. : 212C-MD-03104

Location : Chavez County, New Mexico

Coordinates : 33.62241, -103.56845

Elevation : N/A

Date : Tuesday, May 2, 2023

Sampler : Brady Vaughn

Driller : Scarborough Drilling

Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
0		Loose, reddish brown, silty sand, uncemented	56	
			124	
		Reddish brown and pink, cemented caliche	173	
5		Caliche	156	
			178	
10		Limestone, white and gray, highly weathered. Fine Grained, very broken, dry.		
15				
20		Sandstone, light brown cuttings		
25				
30				
35				
40				
45				
50				

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60		Loose silty sand, brown		
65				
70		Fine grain sand, tan		
75				
80				
85		slight moisture		
90				
95				
100		Driller begins losing air into formation		

* H.O. = Heavy Odor
* H.S. = Heavy Staining

* L.O. = Low Odor
* L.S. = Low Staining



Borehole ID:

Soil Drilling Log

Project Name : Endeavor Tobac GWDB
Project No. : 212C-MD-03104
Location : Chavez County, New Mexico
Coordinates : 33.62241, -103.56845
Elevation : N/A

Date : Tuesday, May 2, 2023

Sampler : Brady Vaughn

Driller : Scarborough Drilling

Method : Air Rotary

[illegible]

* H.O. = Heavy Odor
* H.S. = Heavy Staining

* L.O. = Low Odor
* L.S. = Low Staining

Emdeavor - Tobac SWD GWDB 5/5/23
212C-MD-03104 33.62214, -103.56874 Chaves Co., NM

1430 - Arrive @ site. JSA. Weather Partly cloudy
Ground Water Depth Probe 74°F
2000 -
↓
110.72 TDW No water.

2015 - Tetra tech Left side.

Note - PVC stick out ground surface $\approx 5.5'$

Pink Ribbon Placed @ PVC for visual Aid.



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 216326

CONDITIONS

Operator: ENDEAVOR ENERGY RESOURCES, LP 110 North Marienfeld Midland, TX 79701	OGRID: 190595
	Action Number: 216326
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	8/7/2023