State of New Mexico
Oil Conservation Division

Incident ID	NRM1935358727
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NRM1935358727
District RP	
Facility ID	
Application ID	

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

Printed Name: Charles R. Beauvais II Title: Environmental Coordinator

Signature: Charles R Beauvais II Date: 3/26/2020

email: charles.r.beauvais@conocophillips.com Telephone: 575-988-2043

OCD Only

Received by: Cristina Eads Date: 03/27/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRM1935358727
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☒ Extents of contamination must be fully delineated.

☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Charles R. Beauvais II Title: Environmental Coordinator

Signature: Charles R Beauvais II Date: 03/26/2020

email: charles.r.beauvais@conocophillips.com Telephone: 575-988-2043

OCD Only

Received by: Cristina Eads Date: 03/27/2020

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

Signature: Date: 05/04/2020

Site Assessment Report and Proposed Remediation Workplan

ConocoPhillips Company
Battle Axe
Lea County, New Mexico
Unit Letter A, Section 27, Township 26 South, Range 32 West
Latitude 32.0187 North, Longitude 103.656 West
NMOCD Reference No. Pending

Prepared By:

Etech Environmental & Safety Solutions, Inc.
3100 Plains Highway
Lovington, New Mexico 88260

Daniel Dominguez

Joel W. Lowry

TABLE OF CONTENTS

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of ConocoPhillips Company, has prepared this Report for the Release Site known as the Battle Axe. Details of the release are summarized below:

Location of Release Source

Latitude: 32.0187 Longitude: -103.656

Provided GPS are in WGS84 format.

Site Name:	Battle Axe	Site Type:	Tank Battery
Date Release Discovered:	10/29/2019	API # (if applicable):	

Unit Letter	Section	Township	Range	County
A	27	26S	32W	Lea

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

Nature and Volume of Release

[X] Crude Oil	Volume Released (bbls) 1.55	Volume Recovered (bbls) 0.25
[X] Produced Water	Volume Released (bbls) 29.37	Volume Recovered (bbls) 4.75
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	[X] Yes [ ] No [ ] N/A
[ ] Condensate	Volume Released (bbls)	Volume Recovered (bbls)
[ ] Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
[ ] Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:
pin hole in water leg y strainer

Initial Response

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

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

2.0 SITE CHARACTERIZATION

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100
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.

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**
>100	Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	100 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	N/A 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 **January 28, 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 concentrations of chloride utilizing a Hach Quantab ® chloride test kit.

Based on field observations and field test data, **twenty-six (26)** delineation soil samples **(NH1@Surf, NH1@1, NH2@Surf, NH2@1, EH1@Surf, EH1@1, EH2@Surf, EH2@1, SH1@Surf, SH1@1, SH2@Surf, SH2@1, WH1@Surf, WH1@1, WH2d@Surf, WH2d@1, WH3@Surf, WH3@1, SP1@Surf, SP1@1, SP2@Surf, SP2@1, SP3@Surf, SP3@1, SP4@Surf, and SP4@1)** were submitted to the laboratory for analysis of BTEX, TPH and/or Chloride. Based on laboratory analytical results, soil was not affected above the NMOCD Closure Criteria beyond one (1) ft. bgs, with the exception of WH3@1 which exhibited a chloride concentration of 890 mg/Kg and SP4@1 which exhibited a chloride concentration of 691 mg/Kg.

On **February 13 and 24, 2020,** Etech personnel mobilized onsite to continue sampling activities. On February 13, a hand-augered soil bore was advanced to further define the horizontal extent of soil impacts. On February 24, two test trenches were advanced within the release margins in an effort to further define the vertical extent of soil impacts. During the advancement of the hand-augered soil bore and test trenches, field soil samples were collected and field-screened for the presence of concentrations of chloride utilizing a Hach Quantab ® chloride test kit. A "Site & Sample Location Map" is provided as Figure 3. Field data and soil profile logs, if applicable, are provided as Appendix B.

Based on field observations and field test data, **four (4)** delineation soil samples **(WH3b@Surf, WH3b@1, WH3@3, and SP4@4)** were submitted to the laboratory for analysis of Chloride. Based on laboratory analytical results, soil was not affected above the NMOCD Closure Criteria beyond four (4) ft. bgs and the horizontal extent of affected soil impacted above the NMOCD Closure Criteria was adequately defined. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided in Appendix C.

5.0 PROPOSED REMEDIATION PLAN

Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment, ConocoPhillips Company proposes the following remediation activities designed to advance the Site toward approved closure:

•Prior to mobilizing to the Site, locate and clear utilities via New Mexico One-Call.

•Upon receiving utilities clearance, a ConocPhillips excavation permit will be prepared and approved by ConocoPhillips.

•Utilizing mechanical equipment, excavate impacted soil affected above the NMOCD Closure Criteria in the areas characterized by sample locations SP1 though SP3 to a depth of one (1) ft. bgs.

•Utilizing mechanical equipment, excavate impacted soil affected above the NMOCD Closure Criteria in the area characterized by sample location WH3 to a depth of three (3) ft. bgs.

•Impacted soil beneath and adjacent to process equipment and horizontal separators and associated piping, in the area characterized by sample location SP4, will be excavated to the maximum extent practicable.

•The floor and sidewalls of the excavation will be advanced until laboratory analytical results from confirmation soil samples indicate BTEX, TPH, and chloride concentrations are below the NMOCD Closure Criteria.

•Upon receiving laboratory analytical results from excavation confirmation soil samples, backfill the excavated area with locally sourced, non-impacted "like" material.

•Upon completion of remediation activities, a Remediation Summary and Deferral Request will be prepared detailing remediation activities and laboratory analytical results from confirmation soil samples. The Remediation Summary and Deferral Request will include a scaled map depicting impacted soil affected above NMOCD Closure Criteria remaining in-situ.

•Etech maintains excavation of impacted soil beneath and adjacent to the on-site process equipment, separators, and associated piping poses a risk to human health and safety and will require a major facility deconstruction. Impacted soil affected above NMOCD Closure Criteria and/or NMOCD Reclamation Standard will be remediated upon decommissioning the facility.

6.0 SAMPLING PLAN

Upon completion of excavation activities, representative five-point composite excavation confirmation soil samples will be collected from the excavation sidewalls in each cardinal direction, representing no more than 50 linear ft. A minimum of **one (1)** representative five-point composite excavation confirmation soil sample will be collected from the base of the excavated area representing every **500 square feet**. Additional, discrete grab samples will be collected from wet or visibly stained areas inferred to have been affected by the release, as necessary.

7.0 TIMELINE AND ESTIMATED VOLUME OF SOIL TO BE REMEDIATED

Remediation activities are expected to be completed **within 90 days** of receiving necessary approval(s) of the Site Assessment Summary and Proposed Remediation Plan. Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment it is estimated that approximately **300 cubic yards** is in need of removal.

8.0 RESTORATION, RECLAMATION AND RE-VEGETATION PLAN

Areas affected by remediation and closure activities will be substantially restored to the condition that existed prior to the release, to the extent practicable. Excavated areas will be backfilled with locally sourced, non-impacted "like" material placed at or near original relative positions. The affected area will be 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 and/or landowner-approved seed mixture during the first favorable growing season following closure of the site.

9.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this Site Assessment Report and Proposed Remediation Plan 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. Basis 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 ConocoPhillips Company. Use of the information contained in this report is prohibited within the consent of Etech and/or ConocoPhillips Company.

10.0 DISTRIBUTION

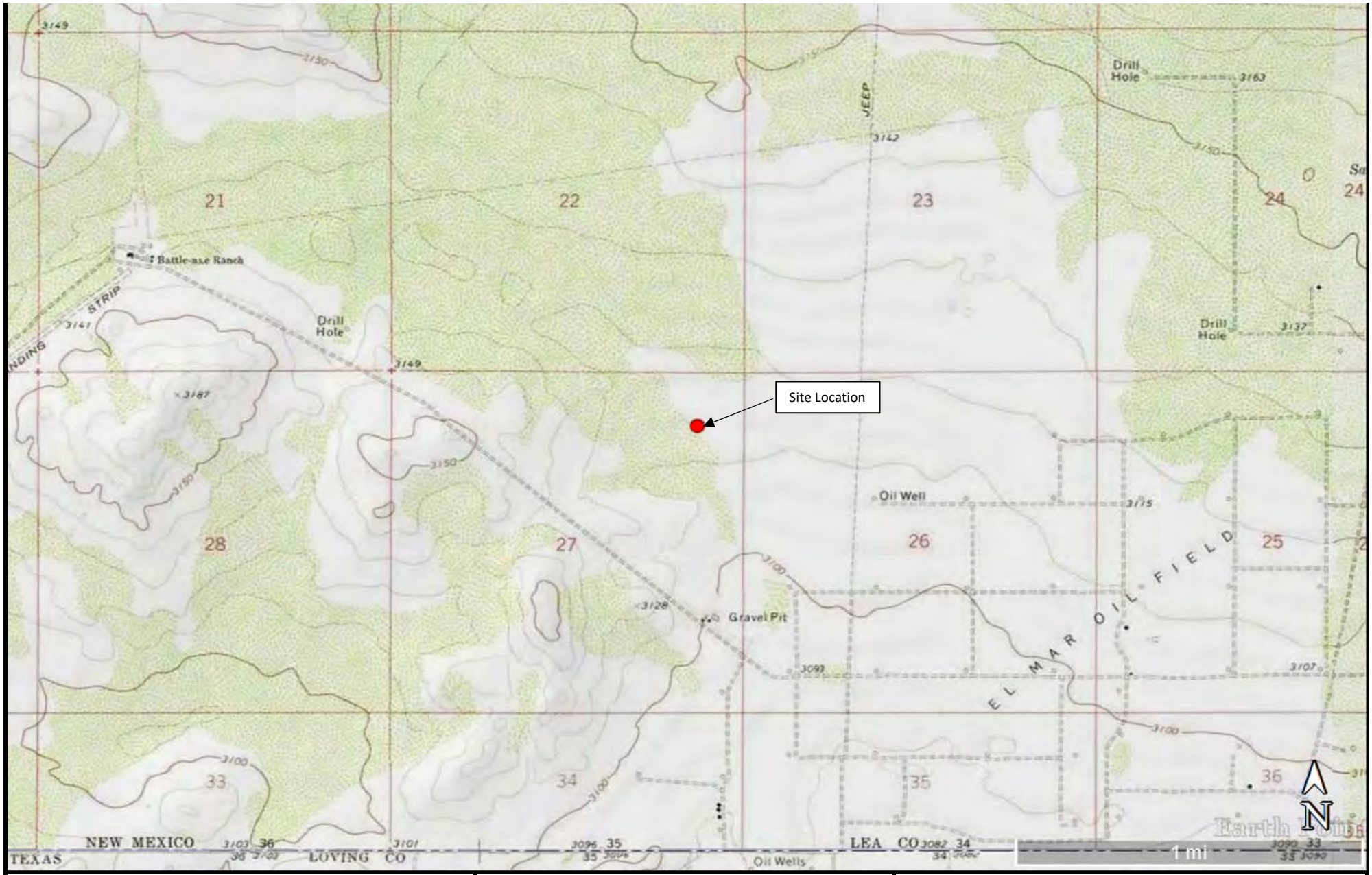
ConocoPhillips Company
3300 B A St.
Midland, TX 79705

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

United States Department of the Interior
Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220

(Electronic Submission)

Figure 1
Topographic Map



Legend:

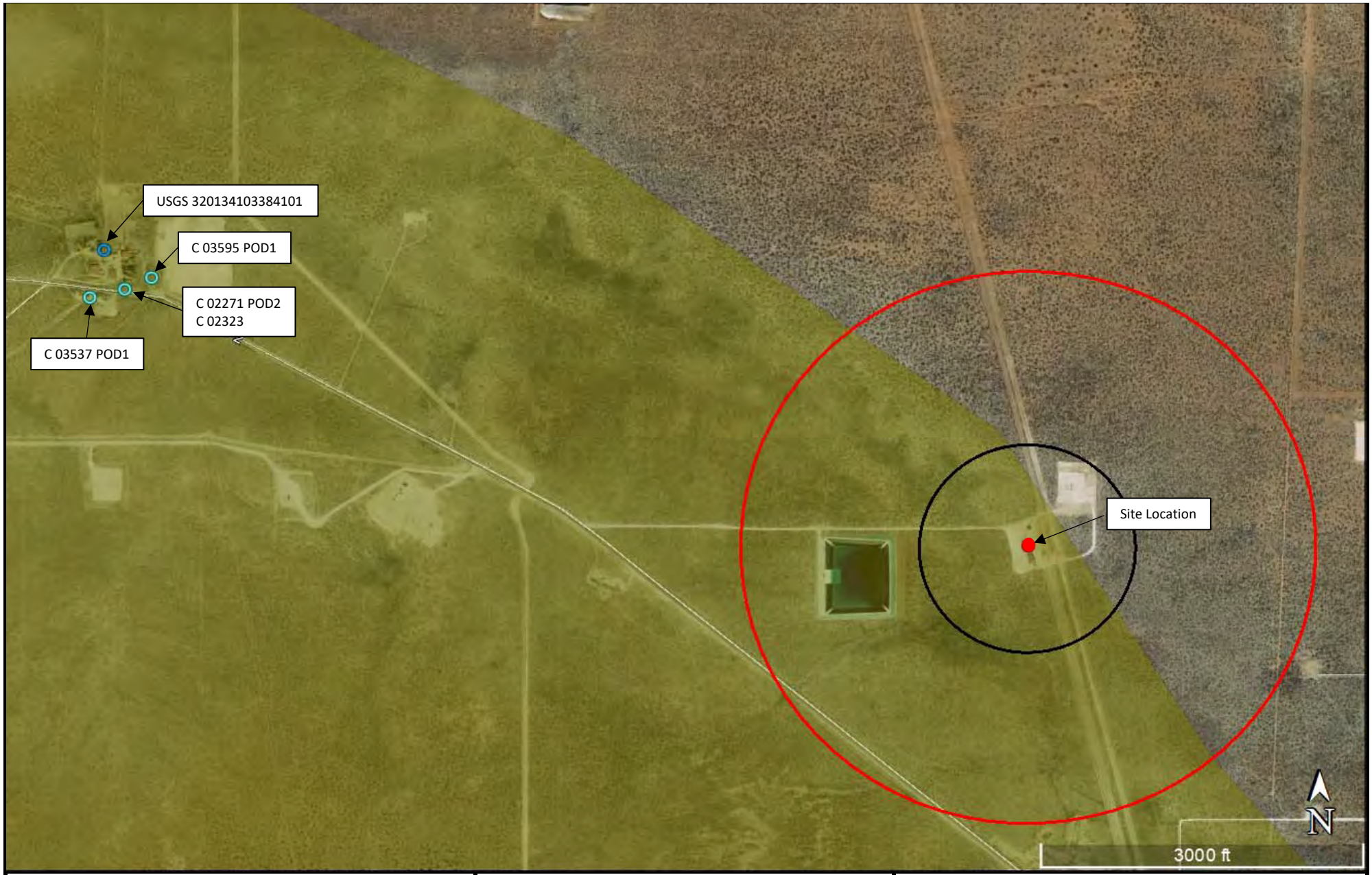
- Site Location

Figure 1
Topographic Map
ConocoPhillips Company
Battle Axe
GPS: 32.0187, -103.656
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: Checked: jwl Date: 1/27/20

Figure 2
Aerial Proximity Map



Legend:

- Site Location
- NMOSE Water Well
- USGS Water Well
- High/Critical Karst
- Half-mile Radius
- 1,000 ft Radius

Figure 2
Aerial Map
ConocoPhillips Company
Battle Axe
GPS: 32.0187, -103.656
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: Checked: jwl Date: 1/27/20

Figure 3
Site and Sample Location Map

Legend:

Sample Location

Affected Area

Figure 3

Site and Sample Location Map

ConocoPhillips Company

Battle Axe

GPS: 32.0187, -103.656

Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: Checked: jwl Date: 3/6/20

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

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX TPH AND CHLORIDE IN SOIL
ConocoPhillips Company
Battle Axe
NMOCD Ref. #:

Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300
				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)
NH1@Surf	1/28/2020	0'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	120
NH1@1	1/28/2020	1'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	7.88
NH2@Surf	1/28/2020	0'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	14.9
NH2@1	1/28/2020	1'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	36.5
EH1@Surf	1/28/2020	0'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	70.1
EH1@1	1/28/2020	1'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	50.3
EH2@Surf	1/28/2020	0'	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	25.2
EH2@1	1/28/2020	1'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	<4.98
SH1@Surf	1/28/2020	0'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	515
SH1@1	1/28/2020	1'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	34.9
SH2@Surf	1/28/2020	0'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	290
SH2@1	1/28/2020	1'	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	9.17
WH1@Surf	1/28/2020	0'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	369
WH1@1	1/28/2020	1'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	87.5
WH2d@Surf	1/28/2020	0'	In-Situ	<0.00200	<0.00200	<49.8	53.4	53.4	<49.8	53.4	235
WH2d@1	1/28/2020	1'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	28.1
WH3@Surf	1/28/2020	0'	In-Situ	<0.00200	<0.00200	<50.0	58.6	58.6	<50.0	58.6	321
WH3@1	1/28/2020	1'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	**890**
SP1@Surf	1/28/2020	0'	In-Situ	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	**1,420**
SP1@1	1/28/2020	1'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	82.3
SP2@Surf	1/28/2020	0'	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	**1,390**
SP2@1	1/28/2020	1'	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	26.7
SP3@Surf	1/28/2020	0'	In-Situ	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	123
SP3@1	1/28/2020	1'	In-Situ	<0.00200	0.00515	<50.0	<50.0	<50.0	<50.0	<50.0	8.01
SP4@Surf	1/28/2020	0'	In-Situ	<0.00199	0.00370	<50.0	52.0	52.0	<50.0	52.0	**6,430**
SP4@1	1/28/2020	1'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	**691**
WH3b@Surf.	2/13/2020	0'	In-Situ	-	-	-	-	-	-	-	<5.03
WH3b@1'	2/13/2020	1'	In-Situ	-	-	-	-	-	-	-	4.0
SP4@4'	2/24/2020	4'	In-Situ	-	-	-	-	-	-	-	37.5
WH3@3'	2/24/2020	3'	In-Situ	-	-	-	-	-	-	-	113
Closure Criteria				**10**	**50**	**-**	**-**	**N/A**	**-**	**100**	**600**

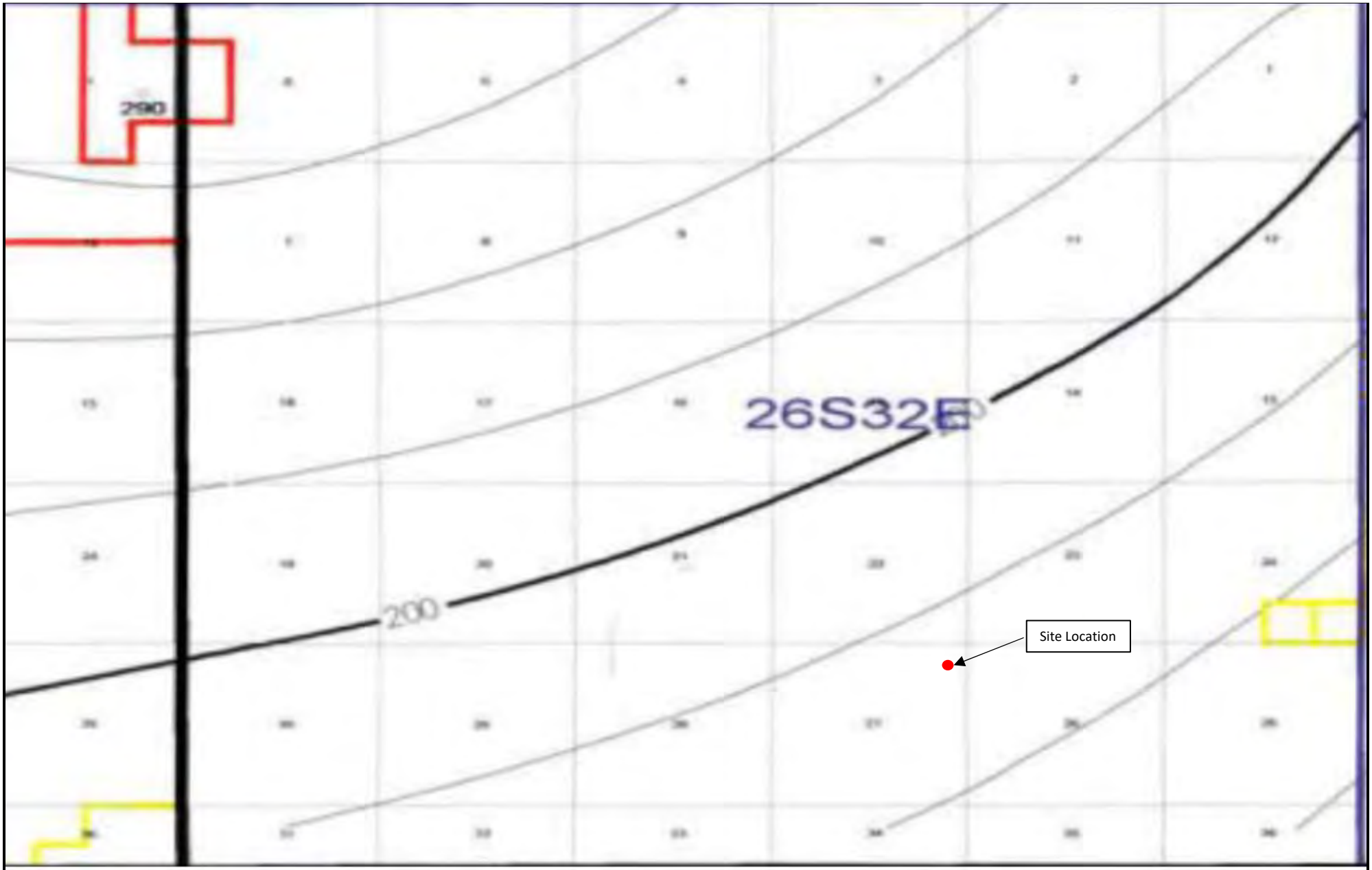
NOTES:

- =

*= Field Test Data

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

Appendix A
Depth to Groundwater Information



Legend:

Site Location

Figure 4

Inferred Depth to Groundwater Trend Map

ConocoPhillips Company

Battle Axe

GPS: 32.0187, -103.656

Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: Checked: jwl Date: 1/27/20

Legend:

- Site Location
- USGS Water Well

Figure 5

USGS Well Proximity Map
ConocoPhillips Company
Battle Axe
GPS: 32.0187, -103.656
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: Checked: jwl Date: 1/27/20

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 626890.52 **Northing (Y):** 3543282.88 **Radius:** 1760

National Water Information System: Web Interface

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Site Selection Results -- 1 sites found

lat_long_bounding_box =

Position	Latitude	Longitude
Corner 1	32.027199	103.697853
Corner 2	32.012820	103.680882

Coordinates are entered as Decimal Degrees. DMS values are converted to Decimal degrees using NAD83 as the datum. Make your bounding box bigger if you are using NAD27 Datum for your DMS values

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

Data for individual sites can be obtained by selecting the site number below

Agency	Site Number	Site Name	Period of Record		
			Begin Date	End Date	Levels

Agency	Site Number	Site Name	Period of Record		
			Begin Date	End Date	Levels
USGS	320134103384101	26S.38E.21.32311	1993-06-16	2013-01-16	2

.

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

Accessibility Plug-Ins FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater levels -- 1 sites found
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320134103384101

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

USGS 320134103384101 26S.38E.21.32311

Lea County, New Mexico
Latitude 32°01'35.2", Longitude 103°41'01.8" NAD83
Land-surface elevation 3,160 feet above NGVD29
The depth of the well is 405 feet below land surface.
The depth of the hole is 405 feet below land surface.
This well is completed in the Dockum Group (231DCKM) local aquifer.

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 measurem
1993-06-16		D	405			0		R		
2013-01-16	12:10 MST	m	221.94			2	R	S	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	0	Water level accuracy to nearest foot
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Status	R	Site had been pumped recently.
Method of measurement	R	Reported, method not known.
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	D	From driller's log or report.
Source of measurement	R	Reported by person other than the owner, driller, or another government agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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

Accessibility Plug-Ins FOIA Privacy Policies and Notices
U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Appendix B
Field Data and Soil Profile Logs

eTECH Environmental & Safety Solutions, Inc.

Sample Log

Date: 1.28.20

Project: Battle Axe

Project Number: 11815 Latitude: 32.0187 Longitude: -103.656

Sample ID	PID/Odor	Chloride Conc.	GPS
NH1 Surface		204	
NH2		120	
EH1		236	
WH2-	yes	960	
[redacted]SH1		355	
[redacted]SH2		388	
[redacted]WH1		344	
EH2		120	
WH3		388	
SP1		1036	
SP2		1288	
SP3 Surface		204	
WH2b- Surface		8900	
NH1 1'		ND <112	
NH2 1'		ND	
EH1 1'		ND	
EH2 1'		ND	
SH1 1'		ND	
SH2 1'		ND	
WH1 1'		ND	
~~WH2b~~ ~~1'~~		~~ND~~	
WH3 1'		ND	
SP1 1'		ND	
SP2 1'		ND	
SP3 1'		ND	
~~WH2e~~ SP4 Surface		6084	
WH2b Surface		204	
WH2c 1'		[redacted] <112	
~~WH2e~~ SP4- 1'		1480	
SP4- 2'		1064	
SP4 3'		348	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

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

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

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

eTECH Environmental & Safety Solutions, Inc.

Sample Log

Date: 2.13.2020

Project: Battle Axe

Project Number: 11815 Latitude: 32.0187 Longitude: -103.656

Sample ID	PID/Odor	Chloride Conc.	GPS
WH3b @ surface		<124	
WH3b @ 1'		<124	
SP4 @ 2'		1228	
SP4 @ 3'		1628	
		2.24.20	
SP4 @ 4'	none	124	
WH3 @ 2'	none	948	
WH3 @ 3'	none	124	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

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

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

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

eTECH Environmental & Safety Solutions, Inc.

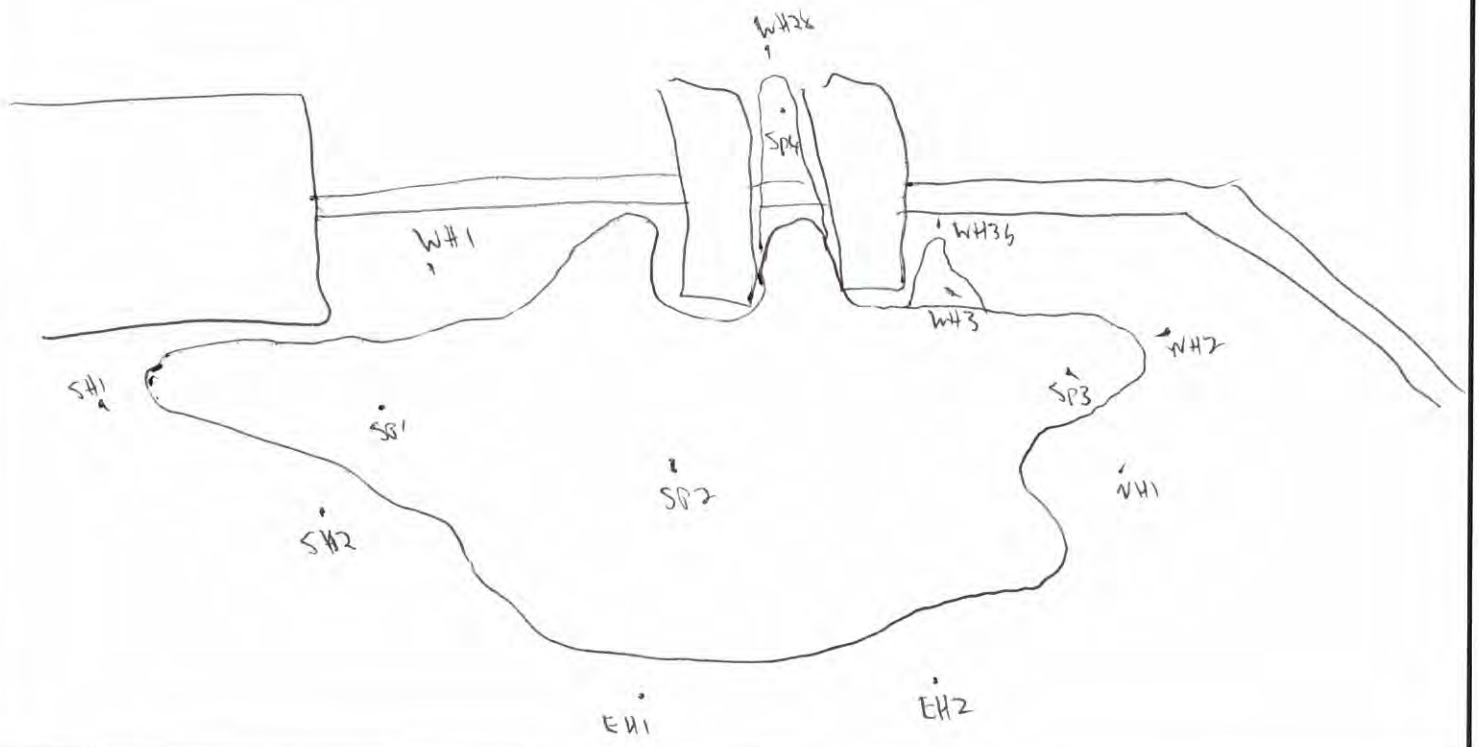
Initial Release Assessment Form

Date: 1.28.20

Project: Battle Axe Clean Up Level: 600 mg/kg Cl-, 100 mg/kg TPH

Project Number: 11815 Latitude: 32.0187 Longitude: -103.656

Site Diagram



Notes: Delineate release area, collect samples and field screen

~Length: 180 ~Width: 100 ~Area: 8000 ~Depth: 3'

	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?	☒	☐

eTECH Environmental & Safety Solutions, Inc.

Soil Profile

Date: 1/28/20

Project: Battle Axe

Project Number: 11815 Latitude: 32.0187 Longitude: -103.656

Depth (ft. bgs)	Description
1	Caliche
2	
3	Caliche: Rock
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
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30	
31	
32	
33	
34	
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38	
39	
40	

Appendix C
Laboratory Analytical Reports

Certificate of Analysis Summary 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Battle Axe

Project Id: 11815
Contact: Daniel Dominguez
Project Location:

Date Received in Lab: Fri Jan-31-20 11:15 am
Report Date: 07-FEB-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	650969-001		650969-002		650969-003		650969-004		650969-005		650969-006	
	Field Id:	NH1@Surf		NH1@1		NH2@Surf		NH2@1		EH1@Surf		EH1@1	
	Depth:	0-		1-		0-		1-		0-		1-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00	
BTEX by EPA 8021B	***Extracted:***	Feb-04-20 09:30		Feb-04-20 09:30		Feb-04-20 09:30		Feb-04-20 09:30		Feb-04-20 09:30		Feb-04-20 09:30	
	Analyzed:	Feb-04-20 15:58		Feb-04-20 16:18		Feb-04-20 16:38		Feb-04-20 16:58		Feb-04-20 17:18		Feb-04-20 17:38	
	Units/RL:	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	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
m,p-Xylenes		<0.00401	0.00401	<0.00400	0.00400	<0.00400	0.00400	<0.00402	0.00402	<0.00398	0.00398	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00201	0.00201	<0.00199	0.00199	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Feb-03-20 11:55		Feb-03-20 11:55		Feb-03-20 11:55		Feb-03-20 11:55		Feb-03-20 11:55		Feb-03-20 11:55	
	Analyzed:	Feb-03-20 12:20		Feb-03-20 13:53		Feb-03-20 14:52		Feb-03-20 14:59		Feb-03-20 15:06		Feb-03-20 15:12	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		120	4.97	7.88	5.02	14.9	4.99	36.5	5.04	70.1	5.01	50.3	5.00
TPH By SW8015 Mod	***Extracted:***	Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45	
	Analyzed:	Feb-01-20 12:48		Feb-01-20 13:51		Feb-01-20 14:12		Feb-01-20 14:33		Feb-01-20 14:54		Feb-01-20 15:15	
	Units/RL:	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	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total TPH		<50.0	50.0	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Battle Axe

Project Id: 11815
Contact: Daniel Dominguez
Project Location:

Date Received in Lab: Fri Jan-31-20 11:15 am
Report Date: 07-FEB-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	650969-007		650969-008		650969-009		650969-010		650969-011		650969-012	
	Field Id:	EH2@Surf		EH2@1		SH1@Surf		SH1@1		SH2@Surf		SH2@1	
	Depth:	0-		1-		0-		1-		0-		1-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00	
BTEX by EPA 8021B	***Extracted:***	Feb-04-20 09:30		Feb-04-20 09:30		Feb-04-20 09:30		Feb-04-20 09:30		Feb-04-20 09:30		Feb-04-20 09:30	
	Analyzed:	Feb-04-20 17:59		Feb-04-20 19:18		Feb-04-20 19:38		Feb-04-20 19:58		Feb-04-20 14:57		Feb-04-20 20:18	
	Units/RL:	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	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399	<0.00399	0.00399	<0.00399	0.00399	<0.00398	0.00398	<0.00397	0.00397
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	Feb-03-20 11:55		Feb-03-20 14:20		Feb-03-20 14:20		Feb-02-20 13:30		Feb-02-20 13:30		Feb-03-20 14:20	
	Analyzed:	Feb-03-20 15:19		Feb-03-20 16:00		Feb-03-20 16:20		Feb-02-20 21:42		Feb-02-20 21:49		Feb-03-20 16:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		25.2	4.99	<4.98	4.98	515	5.00	34.9	5.00	290	5.00	9.17	4.96
TPH By SW8015 Mod	***Extracted:***	Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45	
	Analyzed:	Feb-01-20 15:36		Feb-01-20 15:57		Feb-01-20 16:18		Feb-01-20 16:39		Feb-01-20 17:21		Feb-01-20 17:42	
	Units/RL:	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	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total TPH		<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Battle Axe

Project Id: 11815
Contact: Daniel Dominguez
Project Location:

Date Received in Lab: Fri Jan-31-20 11:15 am
Report Date: 07-FEB-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	650969-013		650969-014		650969-015		650969-016		650969-017		650969-018	
	Field Id:	WH1@Surf		WH1@1		WH2d@Surf		WH2d@1		WH3@Surf		WH3@1	
	Depth:	0-		1-		0-		1-		0-		1-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00	
BTEX by EPA 8021B	***Extracted:***	Feb-04-20 09:30		Feb-04-20 09:30		Feb-04-20 09:30		Feb-05-20 16:00		Feb-05-20 16:00		Feb-05-20 16:00	
	Analyzed:	Feb-04-20 20:39		Feb-04-20 20:59		Feb-04-20 21:19		Feb-06-20 05:04		Feb-06-20 05:24		Feb-06-20 05:45	
	Units/RL:	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	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00400	0.00400	<0.00398	0.00398	<0.00400	0.00400	<0.00399	0.00399	<0.00399	0.00399	<0.00399	0.00399
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Feb-03-20 14:20		Feb-03-20 14:20		Feb-03-20 14:20		Feb-03-20 14:20		Feb-03-20 14:20		Feb-03-20 14:20	
	Analyzed:	Feb-03-20 16:33		Feb-03-20 16:40		Feb-03-20 17:00		Feb-03-20 17:07		Feb-03-20 17:13		Feb-03-20 17:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		369	4.95	87.5	5.04	235	5.01	28.1	4.98	321	5.05	890	4.98
TPH By SW8015 Mod	***Extracted:***	Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 16:45	
	Analyzed:	Feb-01-20 18:03		Feb-01-20 18:24		Feb-01-20 18:45		Feb-01-20 19:06		Feb-01-20 19:26		Feb-01-20 19:47	
	Units/RL:	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	<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	53.4	49.8	<50.0	50.0	58.6	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9
Total TPH		<50.0	50.0	<50.0	50.0	53.4	49.8	<50.0	50.0	58.6	50.0	<49.9	49.9

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Battle Axe

Project Id: 11815
Contact: Daniel Dominguez
Project Location:

Date Received in Lab: Fri Jan-31-20 11:15 am
Report Date: 07-FEB-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	650969-019		650969-020		650969-021		650969-022		650969-023		650969-024	
	Field Id:	SP1@Surf		SP1@1		SP2@Surf		SP2@1		SP3@Surf		SP3@1	
	Depth:	0-		1-		0-		1-		0-		1-	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00		Jan-28-20 00:00	
BTEX by EPA 8021B	***Extracted:***	Feb-05-20 16:00		Feb-05-20 16:00		Feb-05-20 16:00		Feb-06-20 09:00		Feb-06-20 09:00		Feb-06-20 09:00	
	Analyzed:	Feb-06-20 06:05		Feb-06-20 06:25		Feb-05-20 23:24		Feb-06-20 10:04		Feb-06-20 10:24		Feb-06-20 10:44	
	Units/RL:	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	<0.00198	0.00198	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200
Toluene		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00201	0.00201	<0.00201	0.00201	0.00515	0.00200
Ethylbenzene		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200
m,p-Xylenes		<0.00403	0.00403	<0.00398	0.00398	<0.00397	0.00397	<0.00402	0.00402	<0.00402	0.00402	<0.00401	0.00401
o-Xylene		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200
Total Xylenes		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200
Total BTEX		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00201	0.00201	<0.00201	0.00201	0.00515	0.00200
Chloride by EPA 300	***Extracted:***	Feb-03-20 14:20		Feb-03-20 14:20		Feb-03-20 14:20		Feb-03-20 14:20		Feb-03-20 14:20		Feb-03-20 14:20	
	Analyzed:	Feb-03-20 17:26		Feb-03-20 17:33		Feb-03-20 17:53		Feb-03-20 18:00		Feb-03-20 18:20		Feb-03-20 18:26	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1420	24.9	82.3	5.00	1390	4.99	26.7	5.02	123	5.05	8.01	5.05
TPH By SW8015 Mod	***Extracted:***	Jan-31-20 16:45		Jan-31-20 16:45		Jan-31-20 13:00		Jan-31-20 13:00		Jan-31-20 13:00		Jan-31-20 13:00	
	Analyzed:	Feb-01-20 20:08		Feb-01-20 20:28		Feb-01-20 03:55		Feb-01-20 04:15		Feb-01-20 04:34		Feb-01-20 04:53	
	Units/RL:	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	<49.9	49.9	<49.9	49.9	<49.8	49.8	<50.0	50.0
Diesel Range Organics (DRO)		<49.8	49.8	<50.0	50.0	<49.9	49.9	<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	<49.9	49.9	<49.9	49.9	<49.8	49.8	<50.0	50.0
Total TPH		<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<49.8	49.8	<50.0	50.0

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Battle Axe

Project Id: 11815
Contact: Daniel Dominguez
Project Location:

Date Received in Lab: Fri Jan-31-20 11:15 am
Report Date: 07-FEB-20
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	650969-025		650969-026					
	Field Id:	SP4@Surf		SP4@1					
	Depth:	0-		1-					
	Matrix:	SOIL		SOIL					
	Sampled:	Jan-28-20 00:00		Jan-28-20 00:00					
BTEX by EPA 8021B	***Extracted:***	Feb-06-20 09:00		Feb-06-20 09:00					
	Analyzed:	Feb-06-20 11:04		Feb-06-20 11:24					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00200	0.00200				
Toluene		0.00370	0.00199	<0.00200	0.00200				
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200				
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399				
o-Xylene		<0.00199	0.00199	<0.00200	0.00200				
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200				
Total BTEX		0.00370	0.00199	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	Feb-03-20 14:20		Feb-03-20 14:20					
	Analyzed:	Feb-03-20 18:33		Feb-03-20 18:40					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		6430	49.8	691	5.00				
TPH By SW8015 Mod	***Extracted:***	Jan-31-20 13:00		Jan-31-20 13:00					
	Analyzed:	Feb-01-20 05:13		Feb-01-20 05:32					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9				
Diesel Range Organics (DRO)		52.0	50.0	<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9				
Total TPH		52.0	50.0	<49.9	49.9				

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

Version: 1.%

Jessica Kramer
Project Assistant

Analytical Report 650969

for

Etech Environmental & Safety Solution, Inc

Project Manager: Daniel Dominguez

Battle Axe

11815

07-FEB-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

07-FEB-20

Project Manager: **Daniel Dominguez**
Etech Environmental & Safety Solution, Inc
P.O. Box 8469
Midland, TX 79708

Reference: XENCO Report No(s): **650969**
Battle Axe
Project Address:

Daniel Dominguez:

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) 650969. 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. 650969 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,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NH1@Surf	S	01-28-20 00:00	0	650969-001
NH1@1	S	01-28-20 00:00	1	650969-002
NH2@Surf	S	01-28-20 00:00	0	650969-003
NH2@1	S	01-28-20 00:00	1	650969-004
EH1@Surf	S	01-28-20 00:00	0	650969-005
EH1@1	S	01-28-20 00:00	1	650969-006
EH2@Surf	S	01-28-20 00:00	0	650969-007
EH2@1	S	01-28-20 00:00	1	650969-008
SH1@Surf	S	01-28-20 00:00	0	650969-009
SH1@1	S	01-28-20 00:00	1	650969-010
SH2@Surf	S	01-28-20 00:00	0	650969-011
SH2@1	S	01-28-20 00:00	1	650969-012
WH1@Surf	S	01-28-20 00:00	0	650969-013
WH1@1	S	01-28-20 00:00	1	650969-014
WH2d@Surf	S	01-28-20 00:00	0	650969-015
WH2d@1	S	01-28-20 00:00	1	650969-016
WH3@Surf	S	01-28-20 00:00	0	650969-017
WH3@1	S	01-28-20 00:00	1	650969-018
SP1@Surf	S	01-28-20 00:00	0	650969-019
SP1@1	S	01-28-20 00:00	1	650969-020
SP2@Surf	S	01-28-20 00:00	0	650969-021
SP2@1	S	01-28-20 00:00	1	650969-022
SP3@Surf	S	01-28-20 00:00	0	650969-023
SP3@1	S	01-28-20 00:00	1	650969-024
SP4@Surf	S	01-28-20 00:00	0	650969-025
SP4@1	S	01-28-20 00:00	1	650969-026

CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc
Project Name: Battle Axe

Project ID: *11815*
Work Order Number(s): *650969*

Report Date: *07-FEB-20*
Date Received: *01/31/2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3115403 Chloride by EPA 300
Lab Sample ID 650969-020 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 650969-008, -009, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3115566 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected.
Samples affected are: 650969-015,650969-008.

Batch: LBA-3115685 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3115856 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**NH1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-001	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.03.20 11.55	Basis:	Wet Weight
Seq Number:	3115367				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**120**	4.97	mg/kg	02.03.20 12.20		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 12.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 12.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 12.48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 12.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	02.01.20 12.48	
o-Terphenyl	84-15-1	81	%	70-135	02.01.20 12.48	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**NH1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-001	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 15.58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 15.58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 15.58	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.04.20 15.58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 15.58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 15.58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 15.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	70-130	02.04.20 15.58	
1,4-Difluorobenzene	540-36-3	116	%	70-130	02.04.20 15.58	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**NH1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-002	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.03.20 11.55	Basis:	Wet Weight
Seq Number:	3115367				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.88**	5.02	mg/kg	02.03.20 13.53		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.01.20 13.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.01.20 13.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.01.20 13.51	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.01.20 13.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	02.01.20 13.51	
o-Terphenyl	84-15-1	79	%	70-135	02.01.20 13.51	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**NH1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-002	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 16.18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 16.18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 16.18	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 16.18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 16.18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 16.18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 16.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	79	%	70-130	02.04.20 16.18	
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.04.20 16.18	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**NH2@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-003	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.03.20 11.55	Basis:	Wet Weight
Seq Number:	3115367				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.9**	4.99	mg/kg	02.03.20 14.52		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 14.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 14.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 14.12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 14.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	02.01.20 14.12	
o-Terphenyl	84-15-1	78	%	70-135	02.01.20 14.12	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**NH2@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-003	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 16.38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 16.38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 16.38	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 16.38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 16.38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 16.38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 16.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.04.20 16.38	
4-Bromofluorobenzene	460-00-4	72	%	70-130	02.04.20 16.38	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**NH2@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-004	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.03.20 11.55	Basis:	Wet Weight
Seq Number:	3115367				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**36.5**	5.04	mg/kg	02.03.20 14.59		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 14.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 14.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 14.33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 14.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	02.01.20 14.33	
o-Terphenyl	84-15-1	79	%	70-135	02.01.20 14.33	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**NH2@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-004	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.20 16.58	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.20 16.58	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.04.20 16.58	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.04.20 16.58	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.04.20 16.58	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.04.20 16.58	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.04.20 16.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	72	%	70-130	02.04.20 16.58	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 16.58	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**EH1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-005	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.03.20 11.55	Basis:	Wet Weight
Seq Number:	3115367				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**70.1**	5.01	mg/kg	02.03.20 15.06		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 14.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 14.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 14.54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 14.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	02.01.20 14.54	
o-Terphenyl	84-15-1	78	%	70-135	02.01.20 14.54	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**EH1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-005	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 17.18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 17.18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 17.18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 17.18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 17.18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 17.18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 17.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.04.20 17.18	
4-Bromofluorobenzene	460-00-4	73	%	70-130	02.04.20 17.18	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**EH1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-006	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.03.20 11.55	Basis:	Wet Weight
Seq Number:	3115367				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**50.3**	5.00	mg/kg	02.03.20 15.12		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.01.20 15.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.01.20 15.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.01.20 15.15	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.01.20 15.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	02.01.20 15.15	
o-Terphenyl	84-15-1	78	%	70-135	02.01.20 15.15	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**EH1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-006	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 17.38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 17.38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 17.38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 17.38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 17.38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 17.38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 17.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.04.20 17.38	
4-Bromofluorobenzene	460-00-4	80	%	70-130	02.04.20 17.38	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**EH2@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-007	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.03.20 11.55	Basis:	Wet Weight
Seq Number:	3115367				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**25.2**	4.99	mg/kg	02.03.20 15.19		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.01.20 15.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.01.20 15.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.01.20 15.36	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.01.20 15.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-135	02.01.20 15.36	
o-Terphenyl	84-15-1	83	%	70-135	02.01.20 15.36	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**EH2@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-007	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 17.59	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 17.59	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 17.59	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 17.59	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 17.59	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 17.59	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 17.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	76	%	70-130	02.04.20 17.59	
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.04.20 17.59	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**EH2@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-008	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	02.03.20 16.00	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.01.20 15.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.01.20 15.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.01.20 15.57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.01.20 15.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	02.01.20 15.57	
o-Terphenyl	84-15-1	81	%	70-135	02.01.20 15.57	

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Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**EH2@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-008	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 19.18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 19.18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 19.18	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 19.18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 19.18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 19.18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 19.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	66	%	70-130	02.04.20 19.18	**
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.04.20 19.18	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SH1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-009	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**515**	5.00	mg/kg	02.03.20 16.20		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 16.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 16.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 16.18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 16.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-135	02.01.20 16.18	
o-Terphenyl	84-15-1	76	%	70-135	02.01.20 16.18	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SH1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-009	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 19.38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 19.38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 19.38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 19.38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 19.38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 19.38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 19.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.04.20 19.38	
4-Bromofluorobenzene	460-00-4	77	%	70-130	02.04.20 19.38	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SH1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-010	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.02.20 13.30	Basis:	Wet Weight
Seq Number:	3115230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**34.9**	5.00	mg/kg	02.02.20 21.42		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 16.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 16.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 16.39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 16.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-135	02.01.20 16.39	
o-Terphenyl	84-15-1	83	%	70-135	02.01.20 16.39	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SH1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-010	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 19.58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 19.58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 19.58	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.04.20 19.58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 19.58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 19.58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 19.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	77	%	70-130	02.04.20 19.58	
1,4-Difluorobenzene	540-36-3	109	%	70-130	02.04.20 19.58	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SH2@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-011	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	02.02.20 13.30	Basis:	Wet Weight
Seq Number:	3115230				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**290**	5.00	mg/kg	02.02.20 21.49		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 17.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 17.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 17.21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 17.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	02.01.20 17.21	
o-Terphenyl	84-15-1	80	%	70-135	02.01.20 17.21	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SH2@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-011	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 14.57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 14.57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 14.57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 14.57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 14.57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 14.57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 14.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	72	%	70-130	02.04.20 14.57	
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.04.20 14.57	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SH2@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-012	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.17**	4.96	mg/kg	02.03.20 16.27		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.01.20 17.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.01.20 17.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.01.20 17.42	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.01.20 17.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	02.01.20 17.42	
o-Terphenyl	84-15-1	80	%	70-135	02.01.20 17.42	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SH2@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-012	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.04.20 20.18	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.04.20 20.18	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.04.20 20.18	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.04.20 20.18	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.04.20 20.18	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.04.20 20.18	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.04.20 20.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	78	%	70-130	02.04.20 20.18	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.04.20 20.18	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-013	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**369**	4.95	mg/kg	02.03.20 16.33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 18.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 18.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 18.03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 18.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	02.01.20 18.03	
o-Terphenyl	84-15-1	80	%	70-135	02.01.20 18.03	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-013	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 20.39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 20.39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 20.39	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 20.39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 20.39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 20.39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 20.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.04.20 20.39	
4-Bromofluorobenzene	460-00-4	81	%	70-130	02.04.20 20.39	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-014	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**87.5**	5.04	mg/kg	02.03.20 16.40		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 18.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 18.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 18.24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 18.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	02.01.20 18.24	
o-Terphenyl	84-15-1	81	%	70-135	02.01.20 18.24	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-014	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.20 20.59	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.20 20.59	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.20 20.59	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.20 20.59	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.20 20.59	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.20 20.59	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.20 20.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	75	%	70-130	02.04.20 20.59	
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.04.20 20.59	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH2d@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-015	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**235**	5.01	mg/kg	02.03.20 17.00		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.01.20 18.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	**53.4**	49.8	mg/kg	02.01.20 18.45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.01.20 18.45	U	1
Total TPH	PHC635	**53.4**	49.8	mg/kg	02.01.20 18.45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	02.01.20 18.45	
o-Terphenyl	84-15-1	78	%	70-135	02.01.20 18.45	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH2d@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-015	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.04.20 09.30	Basis:	Wet Weight
Seq Number:	3115566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.20 21.19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.20 21.19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.20 21.19	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.20 21.19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.20 21.19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.20 21.19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.20 21.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	02.04.20 21.19	
4-Bromofluorobenzene	460-00-4	69	%	70-130	02.04.20 21.19	**

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH2d@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-016	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.1**	4.98	mg/kg	02.03.20 17.07		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 19.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 19.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 19.06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 19.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	02.01.20 19.06	
o-Terphenyl	84-15-1	79	%	70-135	02.01.20 19.06	

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Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH2d@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-016	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.05.20 16.00	Basis:	Wet Weight
Seq Number:	3115685				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.06.20 05.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.06.20 05.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.06.20 05.04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.06.20 05.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.06.20 05.04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.06.20 05.04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.06.20 05.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	81	%	70-130	02.06.20 05.04	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.06.20 05.04	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH3@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-017	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**321**	5.05	mg/kg	02.03.20 17.13		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 19.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	**58.6**	50.0	mg/kg	02.01.20 19.26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 19.26	U	1
Total TPH	PHC635	**58.6**	50.0	mg/kg	02.01.20 19.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-135	02.01.20 19.26	
o-Terphenyl	84-15-1	86	%	70-135	02.01.20 19.26	

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Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH3@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-017	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.05.20 16.00	Basis:	Wet Weight
Seq Number:	3115685				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.06.20 05.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.06.20 05.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.06.20 05.24	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.06.20 05.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.06.20 05.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.06.20 05.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.06.20 05.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.06.20 05.24	
4-Bromofluorobenzene	460-00-4	79	%	70-130	02.06.20 05.24	

Certificate of Analytical Results 650969

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Battle Axe

Sample Id:	**WH3@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-018	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**890**	4.98	mg/kg	02.03.20 17.20		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.01.20 19.47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.01.20 19.47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.01.20 19.47	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.01.20 19.47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-135	02.01.20 19.47	
o-Terphenyl	84-15-1	82	%	70-135	02.01.20 19.47	

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Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH3@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-018	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.05.20 16.00	Basis:	Wet Weight
Seq Number:	3115685				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.06.20 05.45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.06.20 05.45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.06.20 05.45	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.06.20 05.45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.06.20 05.45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.06.20 05.45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.06.20 05.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	78	%	70-130	02.06.20 05.45	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.06.20 05.45	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SP1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-019	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1420**	24.9	mg/kg	02.03.20 17.26		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.01.20 20.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.01.20 20.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.01.20 20.08	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.01.20 20.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	02.01.20 20.08	
o-Terphenyl	84-15-1	80	%	70-135	02.01.20 20.08	

Certificate of Analytical Results 650969

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Battle Axe

Sample Id:	**SP1@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-019	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.05.20 16.00	Basis:	Wet Weight
Seq Number:	3115685				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.06.20 06.05	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.06.20 06.05	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.06.20 06.05	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.06.20 06.05	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.06.20 06.05	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.06.20 06.05	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.06.20 06.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	02.06.20 06.05	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.06.20 06.05	

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Battle Axe

Sample Id:	**SP1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-020	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**82.3**	5.00	mg/kg	02.03.20 17.33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 16.45	Basis:	Wet Weight
Seq Number:	3115339				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 20.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 20.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 20.28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 20.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-135	02.01.20 20.28	
o-Terphenyl	84-15-1	81	%	70-135	02.01.20 20.28	

Certificate of Analytical Results 650969

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Battle Axe

Sample Id:	**SP1@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-020	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.05.20 16.00	Basis:	Wet Weight
Seq Number:	3115685				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.06.20 06.25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.06.20 06.25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.06.20 06.25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.06.20 06.25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.06.20 06.25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.06.20 06.25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.06.20 06.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	80	%	70-130	02.06.20 06.25	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.06.20 06.25	

Certificate of Analytical Results 650969

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Battle Axe

Sample Id:	**SP2@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-021	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1390**	4.99	mg/kg	02.03.20 17.53		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 13.00	Basis:	Wet Weight
Seq Number:	3115317				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.01.20 03.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.01.20 03.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.01.20 03.55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.01.20 03.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	02.01.20 03.55	
o-Terphenyl	84-15-1	71	%	70-135	02.01.20 03.55	

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Battle Axe

Sample Id:	**SP2@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-021	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.05.20 16.00	Basis:	Wet Weight
Seq Number:	3115685				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.05.20 23.24	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.05.20 23.24	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.05.20 23.24	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.05.20 23.24	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.05.20 23.24	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.05.20 23.24	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.05.20 23.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.05.20 23.24	
4-Bromofluorobenzene	460-00-4	75	%	70-130	02.05.20 23.24	

Certificate of Analytical Results 650969

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Battle Axe

Sample Id:	**SP2@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-022	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**26.7**	5.02	mg/kg	02.03.20 18.00		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 13.00	Basis:	Wet Weight
Seq Number:	3115317				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.01.20 04.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.01.20 04.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.01.20 04.15	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.01.20 04.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-135	02.01.20 04.15	
o-Terphenyl	84-15-1	77	%	70-135	02.01.20 04.15	

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Battle Axe

Sample Id:	**SP2@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-022	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.06.20 09.00	Basis:	Wet Weight
Seq Number:	3115856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.06.20 10.04	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.06.20 10.04	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.06.20 10.04	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.06.20 10.04	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.06.20 10.04	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.06.20 10.04	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.06.20 10.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	02.06.20 10.04	
4-Bromofluorobenzene	460-00-4	84	%	70-130	02.06.20 10.04	

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Battle Axe

Sample Id:	**SP3@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-023	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**123**	5.05	mg/kg	02.03.20 18.20		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 13.00	Basis:	Wet Weight
Seq Number:	3115317				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.01.20 04.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.01.20 04.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.01.20 04.34	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.01.20 04.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-135	02.01.20 04.34	
o-Terphenyl	84-15-1	70	%	70-135	02.01.20 04.34	

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Battle Axe

Sample Id:	**SP3@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-023	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.06.20 09.00	Basis:	Wet Weight
Seq Number:	3115856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.06.20 10.24	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.06.20 10.24	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.06.20 10.24	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.06.20 10.24	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.06.20 10.24	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.06.20 10.24	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.06.20 10.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	83	%	70-130	02.06.20 10.24	
1,4-Difluorobenzene	540-36-3	110	%	70-130	02.06.20 10.24	

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Battle Axe

Sample Id:	**SP3@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-024	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.01**	5.05	mg/kg	02.03.20 18.26		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 13.00	Basis:	Wet Weight
Seq Number:	3115317				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 04.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.01.20 04.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 04.53	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.01.20 04.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	02.01.20 04.53	
o-Terphenyl	84-15-1	86	%	70-135	02.01.20 04.53	

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Battle Axe

Sample Id:	**SP3@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-024	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.06.20 09.00	Basis:	Wet Weight
Seq Number:	3115856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.06.20 10.44	U	1
Toluene	108-88-3	**0.00515**	0.00200	mg/kg	02.06.20 10.44		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.06.20 10.44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.06.20 10.44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.06.20 10.44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.06.20 10.44	U	1
Total BTEX		**0.00515**	0.00200	mg/kg	02.06.20 10.44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	02.06.20 10.44	
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.06.20 10.44	

Certificate of Analytical Results 650969

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Battle Axe

Sample Id:	**SP4@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-025	Date Collected:	01.28.20 00.00	Sample Depth:	0

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6430**	49.8	mg/kg	02.03.20 18.33		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 13.00	Basis:	Wet Weight
Seq Number:	3115317				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.01.20 05.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	**52.0**	50.0	mg/kg	02.01.20 05.13		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.01.20 05.13	U	1
Total TPH	PHC635	**52.0**	50.0	mg/kg	02.01.20 05.13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	02.01.20 05.13	
o-Terphenyl	84-15-1	88	%	70-135	02.01.20 05.13	

Certificate of Analytical Results 650969

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Battle Axe

Sample Id:	**SP4@Surf**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-025	Date Collected:	01.28.20 00.00	Sample Depth:	0
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.06.20 09.00	Basis:	Wet Weight
Seq Number:	3115856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.06.20 11.04	U	1
Toluene	108-88-3	**0.00370**	0.00199	mg/kg	02.06.20 11.04		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.06.20 11.04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.06.20 11.04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.06.20 11.04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.06.20 11.04	U	1
Total BTEX		**0.00370**	0.00199	mg/kg	02.06.20 11.04		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.06.20 11.04	
4-Bromofluorobenzene	460-00-4	83	%	70-130	02.06.20 11.04	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SP4@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-026	Date Collected:	01.28.20 00.00	Sample Depth:	1

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.03.20 14.20	Basis:	Wet Weight
Seq Number:	3115403				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**691**	5.00	mg/kg	02.03.20 18.40		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	01.31.20 13.00	Basis:	Wet Weight
Seq Number:	3115317				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.01.20 05.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.01.20 05.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.01.20 05.32	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.01.20 05.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	74	%	70-135	02.01.20 05.32	
o-Terphenyl	84-15-1	75	%	70-135	02.01.20 05.32	

Certificate of Analytical Results 650969

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SP4@1**	Matrix:	Soil	Date Received:	01.31.20 11.15
Lab Sample Id:	650969-026	Date Collected:	01.28.20 00.00	Sample Depth:	1
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.06.20 09.00	Basis:	Wet Weight
Seq Number:	3115856				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.06.20 11.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.06.20 11.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.06.20 11.24	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.06.20 11.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.06.20 11.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.06.20 11.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.06.20 11.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	82	%	70-130	02.06.20 11.24	
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.06.20 11.24	

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.

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

QC Summary 650969

Etech Environmental & Safety Solution, Inc

Battle Axe

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3115230 — Matrix: Solid — Date Prep: 02.02.20
MB Sample Id: 7695764-1-BLK — LCS Sample Id: 7695764-1-BKS — LCSD Sample Id: 7695764-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	276	110	275	110	90-110	0	20	mg/kg	02.02.20 18:35	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3115367 — Matrix: Solid — Date Prep: 02.03.20
MB Sample Id: 7695826-1-BLK — LCS Sample Id: 7695826-1-BKS — LCSD Sample Id: 7695826-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	255	102	256	102	90-110	0	20	mg/kg	02.03.20 12:02	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3115403 — Matrix: Solid — Date Prep: 02.03.20
MB Sample Id: 7695837-1-BLK — LCS Sample Id: 7695837-1-BKS — LCSD Sample Id: 7695837-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	264	106	264	106	90-110	0	20	mg/kg	02.03.20 15:47	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3115230 — Matrix: Soil — Date Prep: 02.02.20
Parent Sample Id: 650968-007 — MS Sample Id: 650968-007 S — MSD Sample Id: 650968-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	81.1	253	348	105	349	106	90-110	0	20	mg/kg	02.02.20 18:55	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3115230 — Matrix: Soil — Date Prep: 02.02.20
Parent Sample Id: 650968-017 — MS Sample Id: 650968-017 S — MSD Sample Id: 650968-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	248	252	517	107	519	108	90-110	0	20	mg/kg	02.02.20 20:29	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 650969

Etech Environmental & Safety Solution, Inc

Battle Axe

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3115367 Matrix: Soil Date Prep: 02.03.20
Parent Sample Id: 650969-001 MS Sample Id: 650969-001 S MSD Sample Id: 650969-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	120	249	370	100	370	100	90-110	0	20	mg/kg	02.03.20 12:26	

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3115367 Matrix: Soil Date Prep: 02.03.20
Parent Sample Id: 650969-002 MS Sample Id: 650969-002 S MSD Sample Id: 650969-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.88	251	266	103	267	103	90-110	0	20	mg/kg	02.03.20 13:59	

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3115403 Matrix: Soil Date Prep: 02.03.20
Parent Sample Id: 650969-008 MS Sample Id: 650969-008 S MSD Sample Id: 650969-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.40	249	279	111	272	108	90-110	3	20	mg/kg	02.03.20 16:07	X

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3115403 Matrix: Soil Date Prep: 02.03.20
Parent Sample Id: 650969-020 MS Sample Id: 650969-020 S MSD Sample Id: 650969-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	82.3	250	352	108	344	105	90-110	2	20	mg/kg	02.03.20 17:40	

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
Seq Number: 3115317 Matrix: Solid Date Prep: 01.31.20
MB Sample Id: 7695782-1-BLK LCS Sample Id: 7695782-1-BKS LCSD Sample Id: 7695782-1-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)	<15.0	1000	1090	109	1140	114	70-135	4	20	mg/kg	01.31.20 22:48	
Diesel Range Organics (DRO)	<15.0	1000	1080	108	1140	114	70-135	5	20	mg/kg	01.31.20 22:48	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	81		118		119		70-135	%	01.31.20 22:48
o-Terphenyl	83		107		115		70-135	%	01.31.20 22:48

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

QC Summary 650969

Etech Environmental & Safety Solution, Inc

Battle Axe

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3115339 — Matrix: Solid — Date Prep: 01.31.20
MB Sample Id: 7695797-1-BLK — LCS Sample Id: 7695797-1-BKS — LCSD Sample Id: 7695797-1-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)	<15.0	1000	803	80	814	81	70-135	1	20	mg/kg	02.01.20 12:06	
Diesel Range Organics (DRO)	<15.0	1000	891	89	847	85	70-135	5	20	mg/kg	02.01.20 12:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		82		80		70-135	%	02.01.20 12:06
o-Terphenyl	89		85		84		70-135	%	02.01.20 12:06

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3115317 — Matrix: Solid — Date Prep: 01.31.20
MB Sample Id: 7695782-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.31.20 22:29	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3115339 — Matrix: Solid — Date Prep: 01.31.20
MB Sample Id: 7695797-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.01.20 11:45	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3115317 — Matrix: Soil — Date Prep: 01.31.20
Parent Sample Id: 650847-001 — MS Sample Id: 650847-001 S — MSD Sample Id: 650847-001 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)	<15.0	998	884	89	915	92	70-135	3	20	mg/kg	01.31.20 23:46	
Diesel Range Organics (DRO)	56.3	998	938	88	961	91	70-135	2	20	mg/kg	01.31.20 23:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		103		70-135	%	01.31.20 23:46
o-Terphenyl	91		98		70-135	%	01.31.20 23:46

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 650969

Etech Environmental & Safety Solution, Inc

Battle Axe

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3115339 — Matrix: Soil — Date Prep: 01.31.20
Parent Sample Id: 650969-001 — MS Sample Id: 650969-001 S — MSD Sample Id: 650969-001 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)	18.6	997	772	76	779	76	70-135	1	20	mg/kg	02.01.20 13:09	
Diesel Range Organics (DRO)	16.9	997	808	79	819	80	70-135	1	20	mg/kg	02.01.20 13:09	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	79		80		70-135	%	02.01.20 13:09
o-Terphenyl	79		78		70-135	%	02.01.20 13:09

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3115566 — Matrix: Solid — Date Prep: 02.04.20
MB Sample Id: 7695867-1-BLK — LCS Sample Id: 7695867-1-BKS — LCSD Sample Id: 7695867-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0974	97	0.103	103	70-130	6	35	mg/kg	02.04.20 12:38	
Toluene	<0.000456	0.100	0.106	106	0.113	113	70-130	6	35	mg/kg	02.04.20 12:38	
Ethylbenzene	<0.000565	0.100	0.105	105	0.113	113	70-130	7	35	mg/kg	02.04.20 12:38	
m,p-Xylenes	<0.00101	0.200	0.210	105	0.224	112	70-130	6	35	mg/kg	02.04.20 12:38	
o-Xylene	<0.000344	0.100	0.106	106	0.114	114	70-130	7	35	mg/kg	02.04.20 12:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		108		112		70-130	%	02.04.20 12:38
4-Bromofluorobenzene	71		90		96		70-130	%	02.04.20 12:38

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3115685 — Matrix: Solid — Date Prep: 02.05.20
MB Sample Id: 7696077-1-BLK — LCS Sample Id: 7696077-1-BKS — LCSD Sample Id: 7696077-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.123	123	0.107	107	70-130	14	35	mg/kg	02.05.20 21:04	
Toluene	<0.000456	0.100	0.118	118	0.103	103	70-130	14	35	mg/kg	02.05.20 21:04	
Ethylbenzene	<0.000565	0.100	0.112	112	0.0968	97	70-130	15	35	mg/kg	02.05.20 21:04	
m,p-Xylenes	<0.00101	0.200	0.223	112	0.192	96	70-130	15	35	mg/kg	02.05.20 21:04	
o-Xylene	<0.000344	0.100	0.112	112	0.0958	96	70-130	16	35	mg/kg	02.05.20 21:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		112		107		70-130	%	02.05.20 21:04
4-Bromofluorobenzene	70		89		85		70-130	%	02.05.20 21:04

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

Final 1.000

QC Summary 650969

Etech Environmental & Safety Solution, Inc

Battle Axe

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3115856 — Matrix: Solid — Date Prep: 02.06.20
MB Sample Id: 7696080-1-BLK — LCS Sample Id: 7696080-1-BKS — LCSD Sample Id: 7696080-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.105	105	0.115	115	70-130	9	35	mg/kg	02.06.20 07:45	
Toluene	<0.000456	0.100	0.108	108	0.115	115	70-130	6	35	mg/kg	02.06.20 07:45	
Ethylbenzene	<0.000565	0.100	0.104	104	0.109	109	70-130	5	35	mg/kg	02.06.20 07:45	
m,p-Xylenes	<0.00101	0.200	0.209	105	0.219	110	70-130	5	35	mg/kg	02.06.20 07:45	
o-Xylene	<0.000344	0.100	0.105	105	0.110	110	70-130	5	35	mg/kg	02.06.20 07:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		114		112		70-130	%	02.06.20 07:45
4-Bromofluorobenzene	71		95		93		70-130	%	02.06.20 07:45

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3115566 — Matrix: Soil — Date Prep: 02.04.20
Parent Sample Id: 650969-011 — MS Sample Id: 650969-011 S — MSD Sample Id: 650969-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.0963	96	0.100	100	70-130	4	35	mg/kg	02.04.20 13:18	
Toluene	0.000517	0.0998	0.0897	89	0.0987	98	70-130	10	35	mg/kg	02.04.20 13:18	
Ethylbenzene	<0.000564	0.0998	0.0869	87	0.0968	97	70-130	11	35	mg/kg	02.04.20 13:18	
m,p-Xylenes	<0.00101	0.200	0.173	87	0.195	98	70-130	12	35	mg/kg	02.04.20 13:18	
o-Xylene	<0.000344	0.0998	0.0883	88	0.0998	100	70-130	12	35	mg/kg	02.04.20 13:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	114		114		70-130	%	02.04.20 13:18
4-Bromofluorobenzene	84		93		70-130	%	02.04.20 13:18

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3115685 — Matrix: Soil — Date Prep: 02.05.20
Parent Sample Id: 650969-021 — MS Sample Id: 650969-021 S — MSD Sample Id: 650969-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.109	109	0.118	118	70-130	8	35	mg/kg	02.05.20 21:45	
Toluene	<0.000455	0.0998	0.0975	98	0.100	100	70-130	3	35	mg/kg	02.05.20 21:45	
Ethylbenzene	<0.000564	0.0998	0.0855	86	0.0871	87	70-130	2	35	mg/kg	02.05.20 21:45	
m,p-Xylenes	<0.00101	0.200	0.168	84	0.171	86	70-130	2	35	mg/kg	02.05.20 21:45	
o-Xylene	<0.000344	0.0998	0.0872	87	0.0886	89	70-130	2	35	mg/kg	02.05.20 21:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		105		70-130	%	02.05.20 21:45
4-Bromofluorobenzene	90		92		70-130	%	02.05.20 21:45

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

QC Summary 650969

Etech Environmental & Safety Solution, Inc

Battle Axe

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3115856 Matrix: Soil Date Prep: 02.06.20

Parent Sample Id: 650969-022 MS Sample Id: 650969-022 S MSD Sample Id: 650969-022 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000594	0.0998	0.104	104	0.105	104	70-130	1	35	mg/kg	02.06.20 08:25	
Toluene	0.000785	0.0998	0.0970	96	0.0960	95	70-130	1	35	mg/kg	02.06.20 08:25	
Ethylbenzene	<0.000564	0.0998	0.0910	91	0.0880	88	70-130	3	35	mg/kg	02.06.20 08:25	
m,p-Xylenes	<0.00101	0.200	0.178	89	0.174	87	70-130	2	35	mg/kg	02.06.20 08:25	
o-Xylene	0.000413	0.0998	0.0915	91	0.0877	87	70-130	4	35	mg/kg	02.06.20 08:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	116		116		70-130	%	02.06.20 08:25
4-Bromofluorobenzene	92		87		70-130	%	02.06.20 08:25

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike

Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added

LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec

Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

Chain of Custody

Work Order No: 605096 9

XENCO LABORATORIES

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) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 1 of 3

Project Manager:	daniel dominguez	Bill to: (if different)	Charles Beauvais
Company Name:	Etech Environmental	Company Name:	ConocoPhillips Company
Address:	3100 Plains Hwy	Address:	15 W Loving Rd
City, State ZIP:	Lovington, NM 88260	City, State ZIP:	Loving, NM 88256
Phone:	575-745-1959	Email:	charles.r.beauvais@conocophillips.com; pm@etechenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Battle Axe	Turn Around	
Project Number:	11815	Routine ☐	
P.O. Number:		Rush: no	
Sampler's Name:	Daniel Dominguez	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.1 0	Thermometer ID	
Received Intact:	(Yes) No		V8
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	0
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chloride	BTEX	TPH
NH1@Surf	Soil	28-Jan-20		0	1	X	X	X
NH1@1	Soil	28-Jan-20		1	1	X	X	X
NH2@Surf	Soil	28-Jan-20		0	1	X	X	X
NH2@1	Soil	28-Jan-20		1	1	X	X	X
EH1@Surf	Soil	28-Jan-20		0	1	X	X	X
EH1@1	Soil	28-Jan-20		1	1	X	X	X
EH2@Surf	Soil	28-Jan-20		0	1	X	X	X
EH2@1	Soil	28-Jan-20		1	1	X	X	X
SH1@Surf	Soil	28-Jan-20		0	1	X	X	X
SH1@1	Soil	28-Jan-20		1	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

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 Tl 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 Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		1-30-20 4:00	2		1/31/20
3			4		
5			6		1115

Revised Date 051418 Rev. 2018.1

Chain of Custody

XENCO LABORATORIES

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) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000) www.xenco.com

Work Order No: _____

Project Manager:	daniel dominguez	Bill to: (if different)	Charles Beauvais
Company Name:	Etech Environmental	Company Name:	ConocoPhillips Company
Address:	3100 Plains Hwy	Address:	15 W Loving Rd
City, State ZIP:	Lovington, NM 88260	City, State ZIP:	Loving, NM 88256
Phone:	575-745-1959	Email:	charles.r.beauvais@conocophillips.com; pm@etechenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Battle Axe	Turn Around	
Project Number:	11815	Routine ☐	
P.O. Number:		Rush: **no**	
Sampler's Name:	Daniel Dominguez	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	0.4	Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chloride	BTEX	TPH
SH2@Surf	Soil	28-Jan-20		0	1	X	X	X
SH2@1	Soil	28-Jan-20		1	1	X	X	X
WH1@Surf	Soil	28-Jan-20		0	1	X	X	X
WH1@1	Soil	28-Jan-20		1	1	X	X	X
WH2d@Surf	Soil	28-Jan-20		0	1	X	X	X
WH2d@1	Soil	28-Jan-20		1	1	X	X	X
WH3@Surf	Soil	28-Jan-20		0	1	X	X	X
WH3@1	Soil	28-Jan-20		1	1	X	X	X
SP1@Surf	Soil	28-Jan-20		0	1	X	X	X
SP1@1	Soil	28-Jan-20		1	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

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 Tl 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 Tl 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 $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			1-30-20 4:00	2		
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

XENCO LABORATORIES

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) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 3 of 3

Project Manager:	daniel dominguez	Bill to: (if different)	Charles Beauvais
Company Name:	Etech Environmental	Company Name:	ConocoPhillips Company
Address:	3100 Plains Hwy	Address:	15 W Loving Rd
City, State ZIP:	Lovington, NM 88260	City, State ZIP:	Loving, NM 88256
Phone:	575-745-1959	Email:	charles.r.beauvais@conocophillips.com; pm@etechenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Battle Axe	Turn Around	
Project Number:	11815	Routine ☐	
P.O. Number:		Rush: **no**	
Sampler's Name:	Daniel Dominguez	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	6.0	Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chloride	BTEX	TPH
SP2@Surf	Soil	28-Jan-20		0	1	X	X	X
SP2@1	Soil	28-Jan-20		1	1	X	X	X
SP3@Surf	Soil	28-Jan-20		0	1	X	X	X
SP3@1	Soil	28-Jan-20		1	1	X	X	X
SP4@Surf	Soil	28-Jan-20		0	1	X	X	X
SP4@3	Soil	28-Jan-20		3	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

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 Tl 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 Tl 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 $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		N. R.	1-30-20 1400	N. R.		
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

FedEx
Express
FRI - 31 JAN HOLD
PRIORITY OVERNIGHT
HLD
MAFA
LBB
TX-US
4705 2522 7669
TRK#
0201
41 MAFA
ORIGIN ID:HOBR (575) 392-7550
** MAIL SERVICES ETC, LLC
4008 N GRIMES
HOBBS NM 88240
UNITED STATES US
TO XENCO LABORATORIES HOLD FOR PICK UP
FEDEX EXPRESS SHIP CENTER
FEDEX EXPRESS SHIP CENTER
3600 COUNTY ROAD 1276 SOUTH
MIDLAND TX 79711
(432) 563-1800
INV:
PO:
REF:
DEPT:
BILL RECIPIENT
SHIP DATE: 30JAN20
ACTWGT: 51.00 LB MAN
CAD: 09093281/CAFE3211
DIMS: 24x14x14 IN
551C2/DF82/104C

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 01/31/2020 11:15:00 AM

Work Order #: 650969

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.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**

*** 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: 01/31/2020

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 01/31/2020

Jessica Kramer

Analytical Report 652524

for

Etech Environmental & Safety Solution, Inc

Project Manager: Joel Lowry

Battle Axe

11815

18-FEB-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

18-FEB-20

Project Manager: **Joel Lowry**
Etech Environmental & Safety Solution, Inc
P.O. Box 62228
Midland, TX 79711

Reference: XENCO Report No(s): **652524**
Battle Axe
Project Address: 32.0187,-103.656

Joel Lowry:

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) 652524. 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. 652524 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,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 652524

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
WH3b @ Surface	S	02-13-20 00:00	0 ft	652524-001
WH3b @ 1'	S	02-13-20 00:00	1 ft	652524-002

CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Battle Axe

Project ID: *11815*
Work Order Number(s): *652524*

Report Date: *18-FEB-20*
Date Received: *02/17/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results

652524

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id: **WH3b @ Surface** Matrix: Soil Sample Depth: 0 ft

Lab Sample Id: 652524-001 Date Collected: 02.13.20 00.00 Date Received: 02.17.20 08.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: CHE % Moist: Tech: CHE

Seq Number: 3116782 Date Prep: 02.17.20 13.05

Prep seq: 7696798

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<5.03	5.03	0.864	mg/kg	02.17.20 14:51	U	1

Sample Id: **WH3b @ 1'** Matrix: Soil Sample Depth: 1 ft

Lab Sample Id: 652524-002 Date Collected: 02.13.20 00.00 Date Received: 02.17.20 08.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Analyst: CHE % Moist: Tech: CHE

Seq Number: 3116782 Date Prep: 02.17.20 13.05

Prep seq: 7696798

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**15.7**	5.01	0.860	mg/kg	02.17.20 14:56		1

Certificate of Analytical Results

652524

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**7696798-1-BLK**	Matrix:	Solid	Sample Depth:	
Lab Sample Id:	7696798-1-BLK	Date Collected:		Date Received:	
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Analyst:	CHE	% Moist:		Tech:	CHE
Seq Number:	3116782	Date Prep:	02.17.20 13.05		
		Prep seq:	7696798		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<5.00	5.00	0.858	mg/kg	02.17.20 13:32	U	1

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.

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

BS / BSD Recoveries

Project Name: Battle Axe

Work Order #: 652524 **Project ID:** 11815

Analyst: CHE **Date Prepared:** 02/17/2020 **Date Analyzed:** 02/17/2020

Lab Batch ID: 3116782 **Sample:** 7696798-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	256	102	250	245	98	4	90-110	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Battle Axe

Work Order # : 652524 **Project ID:** 11815

Lab Batch ID: 3116782 **QC- Sample ID:** 650826-051 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/17/2020 **Date Prepared:** 02/17/2020 **Analyst:** CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	721	250	934	85	250	932	84	0	90-110	20	X

Lab Batch ID: 3116782 **QC- Sample ID:** 652504-008 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 02/17/2020 **Date Prepared:** 02/17/2020 **Analyst:** CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	115	249	363	100	249	363	100	0	90-110	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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: 652524

www.xenco.com Page 1 of 1

Project Manager:	Joel Lowry	Bill to: (if different)	ConocoPhillips C/O Charles R. Beauvais
Company Name:	Etech Environmental and Safety	Company Name:	
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 ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level I ☐ Level II ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Battle Axe	Turn Around	
Project Number:	11815	Routine: ☐	
Project Location	32.0187, -103.656	Rush: ☐	
Sampler's Name:	Miguel Ramirez	Due Date:	
PO #:			

SAMPLE RECEIPT			
Temperature (°C):	0.9	Temp Blank: Yes No	Wet Ice: Yes No
Received Intact:	Yes No	Thermometer ID	128
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	TPH 8015M	BTEX	Cl-
WH3b @ Surface		2/13/2020		0'	1/NO			X
WH3b @ 1'		2/13/2020		1'	1/NO			X

ANALYSIS REQUEST

Preservative Codes

HNO3: HN
H2S04: H2
HCL: HL
None: NO
NaOH: Na
MeOH: Me
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

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 Tl 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 Tl U **1631 / 245.1 / 7470 / 7471 : Hg**

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		2/14 3:39	2		2/17/20
3		2/14 3:50	4		800
5			6		

Revised Date101419 Rev. 2019.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 02.17.2020 08.00.00 AM

Work Order #: 652524

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.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**

*** 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: 02.17.2020

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 02.18.2020

Jessica Kramer

Certificate of Analysis Summary 653692

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Battle Axe

Project Id:
Contact: Daniel Dominguez
Project Location:

Date Received in Lab: Wed Feb-26-20 11:45 am
Report Date: 27-FEB-20
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	653692-001			653692-002								
	Field Id:	SP4@4'			WH3@3'								
	Depth:	4- ft			3- ft								
	Matrix:	SOIL			SOIL								
	Sampled:	Feb-24-20 00:00			Feb-24-20 00:00								
Chloride by EPA 300	***Extracted:***	Feb-26-20 16:05			Feb-26-20 16:05								
	Analyzed:	Feb-26-20 17:28			Feb-26-20 17:34								
	Units/RL:	mg/kg	RL		mg/kg	RL							
Chloride		37.5	4.97		113	5.00							

Jessica Kramer
Project Assistant

Analytical Report 653692

for

Etech Environmental & Safety Solution, Inc

Project Manager: Daniel Dominguez

Battle Axe

27-FEB-20

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

27-FEB-20

Project Manager: **Daniel Dominguez**
Etech Environmental & Safety Solution, Inc
P.O. Box 62228
Midland, TX 79711

Reference: XENCO Report No(s): **653692**
Battle Axe
Project Address:

Daniel Dominguez:

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) 653692. 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. 653692 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,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 653692

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP4@4'	S	02-24-20 00:00	4 ft	653692-001
WH3@3'	S	02-24-20 00:00	3 ft	653692-002

CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Battle Axe

Project ID:
Work Order Number(s): *653692*

Report Date: *27-FEB-20*
Date Received: *02/26/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 653692

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**SP4@4'**	Matrix:	Soil	Date Received:	02.26.20 11.45
Lab Sample Id:	653692-001	Date Collected:	02.24.20 00.00	Sample Depth:	4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.26.20 16.05	Basis:	Wet Weight
Seq Number:	3117802				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**37.5**	4.97	mg/kg	02.26.20 17.28		1

Certificate of Analytical Results 653692

Etech Environmental & Safety Solution, Inc, Midland, TX

Battle Axe

Sample Id:	**WH3@3'**	Matrix:	Soil	Date Received:	02.26.20 11.45
Lab Sample Id:	653692-002	Date Collected:	02.24.20 00.00	Sample Depth:	3 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.26.20 16.05	Basis:	Wet Weight
Seq Number:	3117802				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**113**	5.00	mg/kg	02.26.20 17.34		1

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.

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

QC Summary 653692

Etech Environmental & Safety Solution, Inc

Battle Axe

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3117802 Matrix: Solid Date Prep: 02.26.20
MB Sample Id: 7697558-1-BLK LCS Sample Id: 7697558-1-BKS LCSD Sample Id: 7697558-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	252	101	252	101	90-110	0	20	mg/kg	02.26.20 16:20	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3117802 Matrix: Soil Date Prep: 02.26.20
Parent Sample Id: 653687-004 MS Sample Id: 653687-004 S MSD Sample Id: 653687-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	342	250	580	95	579	95	90-110	0	20	mg/kg	02.26.20 16:36	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3117802 Matrix: Soil Date Prep: 02.26.20
Parent Sample Id: 653745-002 MS Sample Id: 653745-002 S MSD Sample Id: 653745-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	297	250	538	96	539	97	90-110	0	20	mg/kg	02.26.20 17:49	

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

Chain of Custody

XENCO LABORATORIES
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) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com

Work Order No: 653697

Page 1 of 1

Project Manager:	daniel dominguez	Bill to: (if different)	Charles Beauvais
Company Name:	Etech Environmental	Company Name:	ConocoPhillips Company
Address:	3100 Plains Hwy	Address:	15 W Loving Rd
City, State ZIP:	Lovington, NM 88260	City, State ZIP:	Loving, NM 88256
Phone:	575-745-1959	Email:	charles.r.beauvais@conocophillips.com; pm@etechenv.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Battle Axe	Turn Around	
Project Number:	11815	Routine ☐	
P.O. Number:		Rush: yes	
Sampler's Name:	Daniel Dominguez	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.6	Thermometer ID		
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	0.0	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chloride	BTEX	TPH
SP4@4'	Soil	24-Feb-20		4	1	X		
WH3@3'	Soil	24-Feb-20		3	1	X		

ANALYSIS REQUEST

Work Order Notes

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

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 Tl 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 Tl U 1631 / 245.1 / 7470 / 7471 : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			2/25 3:00	2			2/26 1145
3				4			
5				6			

Revised Date 051418 Rev. 2018.1

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 02.26.2020 11.45.00 AM

Work Order #: 653692

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.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**

*** 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: 02.26.2020

Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 02.27.2020

Jessica Kramer

Appendix D
Photographic Log

Photographic Log

Photo Number: #1 **Photo Direction:** East **Photo Description:** lease sign	
Photo Number: #2 **Photo Direction:** North **Photo Description:** view across release area	

Photographic Log

Photo Number: #3 **Photo Direction:** Northwest **Photo Description:** view across release area	

Photo Number: #4 **Photo Direction:** North **Photo Description:** view across release area	

Photographic Log

Photo Number: #5 **Photo Direction:** North **Photo Description:** view across release area	

Photo Number: #6 **Photo Direction:** North **Photo Description:** view across release area