Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	nRM2020236260
District RP	
Facility ID	
Application ID	

Closure

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

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

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

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

Printed Name: Jacqui Harris Title: Environmental Coordinator

Signature: Jacqui Harris Date: 8.2.21

email: jacqui.harris@conocophillips.com Telephone: (575)745-1807

OCD Only

Received by: Chad Hensley Date: 08/31/2021

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

Closure Approved by: Chad Hensley Date: 08/31/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

Remediation Summary & Soil Closure Request

COG Operating, LLC
Lusk Deep Unit A #029H
Lea County, New Mexico
Unit Letter "D", Section 17, Township 19 South, Range 32 East
Latitude 32.6666 North, Longitude 103.7943 West
NMOCD Reference No. nRM2020236260

Prepared By:

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

Ben J. Arguijo

Joel W. Lowry

ETECH Environmental & Safety Solutions, Inc.

Midland • San Antonio • Lubbock • Lovington • Lafayette

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1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of COG Operating, LLC (COG), has prepared this *Remediation Summary & Soil Closure Request* for the release site known as the Lusk Deep Unit A #029H (henceforth, "Site"). Details of the release are summarized below:

Location of Release Source

Latitude: 32.6666 Longitude: -103.7943

Provided GPS are in WGS84 format.

Site Name:	Lusk Deep Unit A #029H	Site Type:	Well Head
Date Release Discovered:	7/3/2020	API # (if applicable):	30-025-41563

Unit Letter	Section	Township	Range	County
"D"	17	19S	32E	Lea

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

Nature and Volume of Release

[ ] Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
[X] Produced Water	Volume Released (bbls) 12	Volume Recovered (bbls) 11
	Is the concentration of total dissolved solids (TDS) in the produced water > 10,000 mg/L?	[X] Yes [ ] No [ ] N/A
[ ] Condensate	Volume Released (bbls)	Volume Recovered (bbls)
[ ] Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
[ ] Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:
The release was caused by internal corrosion. The release remained on the well pad. A vacuum truck was utilized to recover freestanding fluids.

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 Site.

Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. In addition, on March 17, 2021, an investigative soil boring/temporary monitor well was drilled at the Lusk Deep Unit A #029H tank battery in an effort to determine if shallow groundwater is present in the area. The investigative soil bore was advanced to a total depth of approximately 105 feet below ground surface (bgs) and left open for over 72 hours. A groundwater gauging event conducted on March 24, 2021, indicated the depth to groundwater was approximately 83.8 feet bgs. The location of the investigative soil bore/temporary monitor well is depicted in Figure 2. A drilling log is provided in Appendix B.

What is the shallowest depth to groundwater beneath the area affected by the release?	83'
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) and Fish & Wildlife Services (FWS) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted in Figures 1, 2, 4, and 5.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

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

Probable Depth to Groundwater	Constituent	Laboratory Analytical Method	Closure Criteria*†	Reclamation Standard*‡
83'	Chloride (Cl-)	EPA 300.0 or SM4500 Cl B	10,000	600
	Total Petroleum Hydrocarbons (TPH)	EPA SW-846 Method 8015M Ext	2,500	100
	Gas Range Organics + Diesel Range Organics (GRO + DRO)	EPA SW-846 Method 8015M	1,000	-
	Benzene	EPA SW-846 Methods 8021b or 8260b	10	10
	Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA SW-846 Methods 8021b or 8260b	50	50

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

4.0 INITIAL SITE ASSESSMENT

On December 18, 2020, and January 21, 2021, COG conducted an initial assessment of the release. During the initial assessment, a series of hand-augered soil bores were advanced within the release margins in an effort to determine the vertical extent of impacted soil. 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 impacted soil. During the advancement of the hand-augered soil bores, field soil samples were collected and field-screened utilizing olfactory/visual senses. Delineation soil samples were submitted to a certified commercial 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) foot bgs, and the horizontal extent of impacted soil was adequately defined.

5.0 PROPOSED REMEDIATION PLAN

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

- Excavate the impacted area to a total depth of one (1) foot bgs.
- Haul all excavated material to an NMOCD-approved solid waste disposal facility.
- Collect representative 5-point composite samples every 200 square feet from the bottom and sidewalls of the excavated area. Collect discrete soil samples from any "hot spots" encountered during the excavation.
- Backfill the excavation with clean, "like" material and contour it to match the surrounding terrain.

6.0 REGULATORY APPROVALS & STIPULATIONS

On January 28, 2021, a *Work Plan* was submitted to the NMOCD proposing the aforementioned remediation activities to advance the Site toward regulatory closure. The *Work Plan* was subsequently approved by the NMOCD, with the stipulation that the depth to groundwater be more adequately determined.

Please reference the *Work Plan* for additional details regarding the initial site assessment and proposed remediation activities.

7.0 REMEDIATION ACTIVITIES SUMMARY

On July 7, 2021, remediation activities commenced at the Site. In accordance with the NMOCD-approved *Work Plan,* impacted soil affected above the NMOCD Closure Criteria was excavated and stockpiled on-site, pending transfer to an NMOCD-approved surface waste facility for disposal. Olfactory/visual senses and a Hach Quantab® chloride test kit were utilized to field-screen the horizontal and vertical extent of impacted soil and to guide the excavation. The floor and sidewalls of the excavation were advanced until field tests and field observations suggested BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria.

On July 8, 2021, Etech collected 22 confirmation soil samples (NW1, NW2, NW3, EW1, EW2, SW1, SW2, SW3, WW1 through WW4, and CFS1 @ 1' through CFS10 @ 1') from the sidewalls and floor of the excavated area. The soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria in each of the submitted soil samples.

The final dimensions of the excavated area were approximately 105 feet in length, 62 to 108 feet in width, and one (1) foot in depth. During the course of remediation activities, approximately 210 cubic yards of impacted soil was transported to an NMOCD-approved surface waste facility for disposal.

The extent of the excavated area and the locations of the auger holes and composite confirmation soil samples are depicted in Figure 3, "Site & Sample Location Map". Soil chemistry data is summarized in Table 1. Laboratory analytical reports are provided in Appendix C. General photographs of the Site are provided in Appendix D.

8.0 RESTORATION, RECLAMATION & RE-VEGETATION PLAN

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

9.0 SOIL CLOSURE REQUEST

Remediation activities were conducted in accordance with the NMOCD-approved *Work Plan* . Impacted soil affected above the NMOCD Closure Criteria was excavated and transported to an NMOCD-approved disposal facility. Laboratory analytical results from confirmation soil samples indicate concentrations of BTEX, TPH, and chloride are below the NMOCD Closure Criteria.

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

10.0 LIMITATIONS

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

This report has been prepared for the benefit of COG Operating, LLC. Use of the information contained in this report is prohibited without the consent of Etech and/or COG Operating, LLC.

11.0 DISTRIBUTION

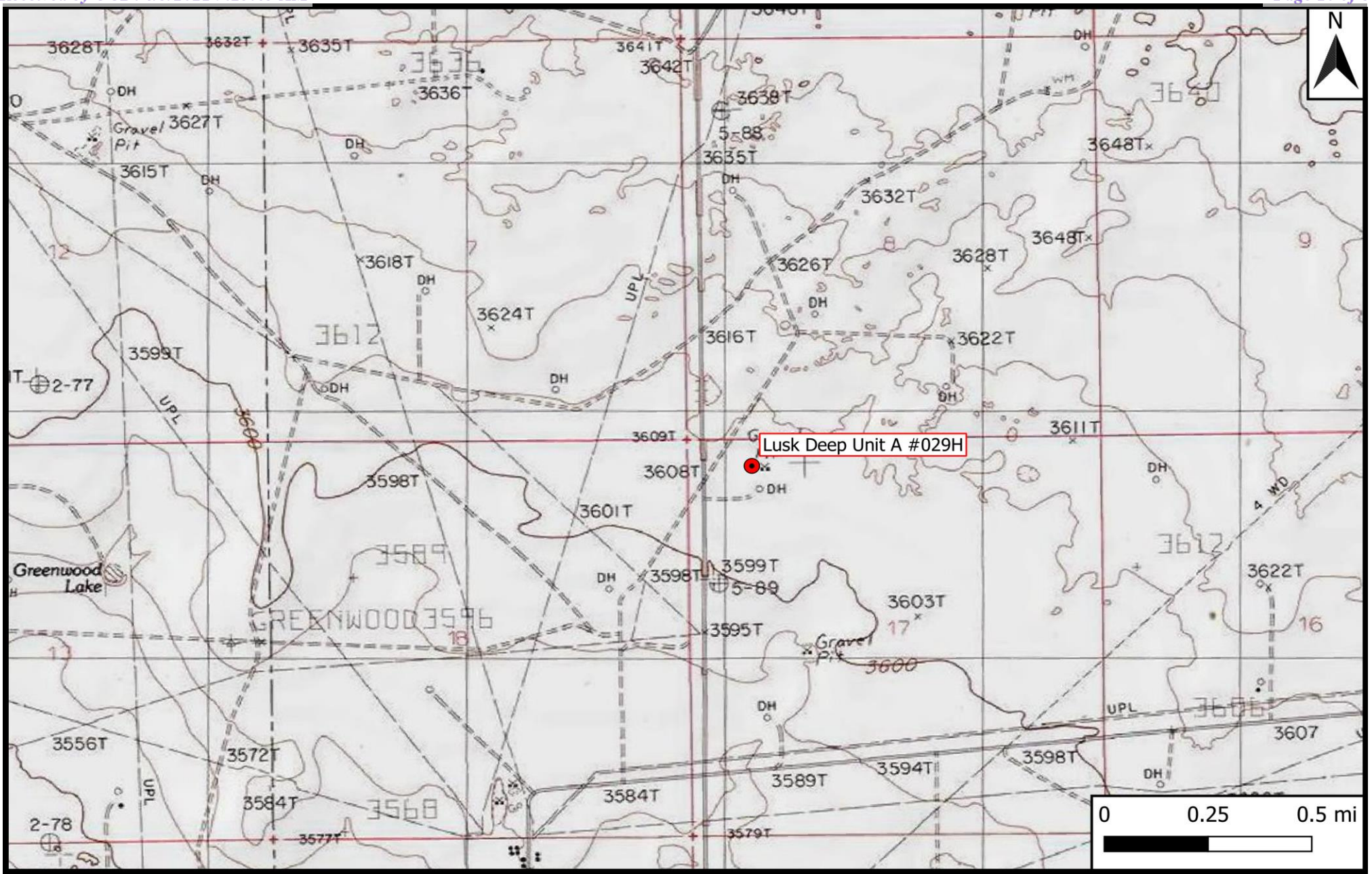
COG Operating, LLC
600 West Illinois Avenue
Midland, TX 79701

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

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

COG Operating, LLC

Lusk Deep Unit A #029H

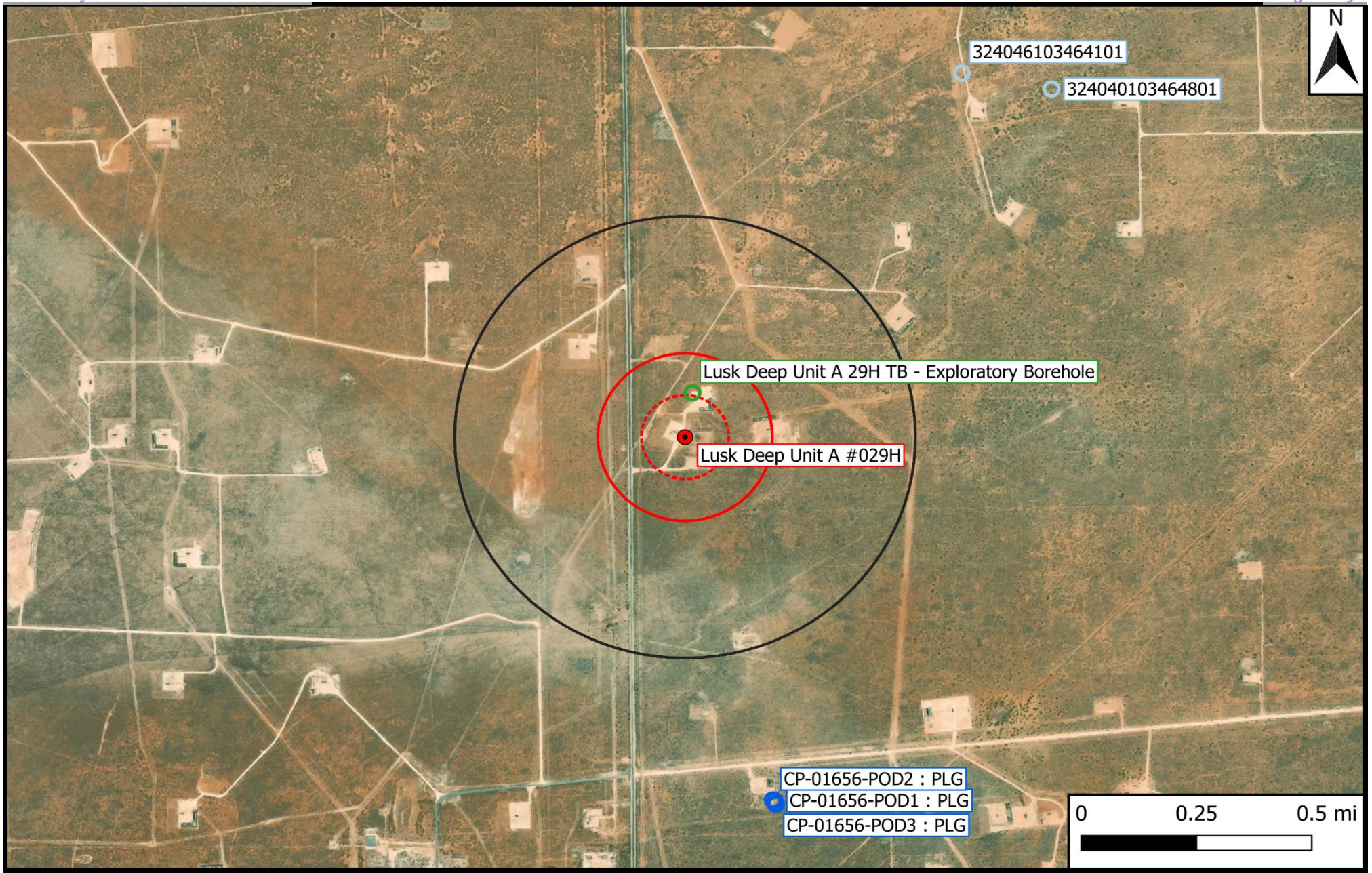
GPS: 32.6666, -103.7943

Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 7/9/21

Figure 2
Aerial Proximity Map



Legend

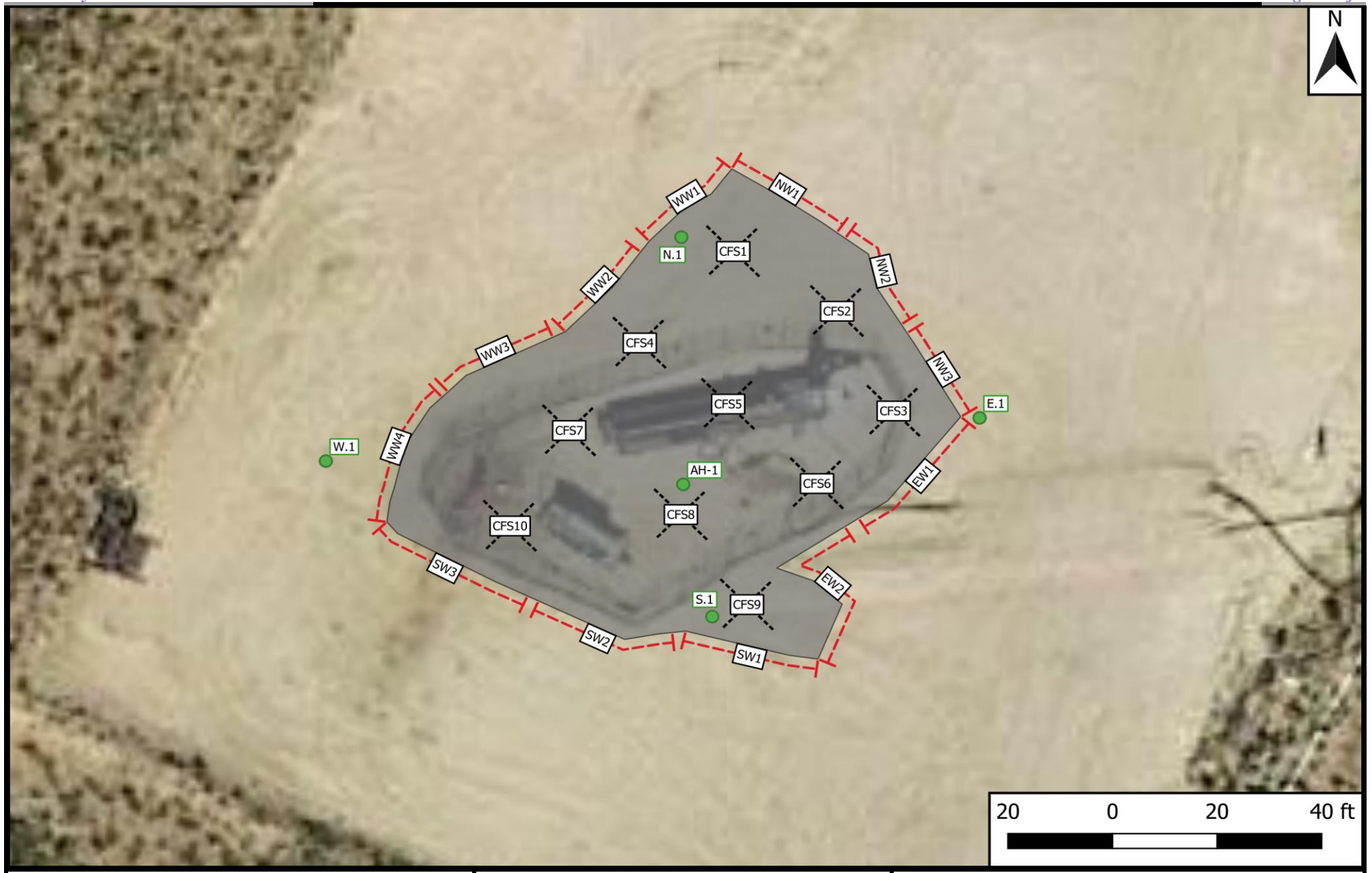
- Site Location
- Well - NMOSE
- Well - USGS
- Well - Investigative/Monitor
- Potash Mine Workings
- 1% Annual Flood Chance
- Emergent/Forested Wetlands
- Freshwater Pond/Lake
- Medium/High Karst
- Riverine
- 500-Ft Radius
- 1,000-Ft Radius
- 0.5-Mi Radius

Figure 2
Aerial Proximity Map
COG Operating, LLC
Lusk Deep Unit A #029H
GPS: 32.6666, -103.7943
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 7/9/21

Figure 3
Site & Sample Location Map



Legend

- Excavation Extent
- Auger Hole
- Composite Floor Sample
- Composite Wall Sample

Figure 3

Site & Sample Location Map

COG Operating, LLC

Lusk Deep Unit A #029H

GPS: 32.6666, -103.7943

Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 7/29/21

Table 1
Concentrations of BTEX, TPH & Chloride in Soil

Table 1
Concentrations of BTEX, TPH & Chloride in Soil
COG Operating, LLC
Lusk Deep Unit A #029H
NMOCD Ref. #: nRM2020236260

NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**10,000**
NMOCD Reclamation Standard				**10**	**50**	**-**	**-**	**-**	**-**	**100**	**600**
Sample ID	**Date**	**Depth (Feet)**	**Soil Status**	**SW 846 8021B**		**SW 846 8015M Ext.**					**4500 Cl**
				Benzene (mg/kg)	**BTEX (mg/kg)**	**GRO C_6-C_{10} (mg/kg)**	**DRO C_{10}-C_{28} (mg/kg)**	**GRO + DRO C_6-C_{28} (mg/kg)**	**ORO C_{28}-C_{36} (mg/kg)**	**TPH C_6-C_{36} (mg/kg)**	**Chloride (mg/kg)**
NW1	7/8/2021	0-1	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	4,700
NW2	7/8/2021	0-1	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	1,900
NW3	7/8/2021	0-1	In-Situ	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	698
EW1	7/8/2021	0-1	In-Situ	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	821
EW2	7/8/2021	0-1	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,840
SW1	7/8/2021	0-1	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,290
SW2	7/8/2021	0-1	In-Situ	<0.00201	<0.00402	<49.8	81.7	81.7	<49.8	81.7	380
SW3	7/8/2021	0-1	In-Situ	<0.00201	0.187	<50.0	297	297	69.3	366	943
WW1	7/8/2021	0-1	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	235
WW2	7/8/2021	0-1	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	1,210
WW3	7/8/2021	0-1	In-Situ	<0.00201	<0.00402	<50.0	74.1	74.1	<50.0	74.1	170
WW4	7/8/2021	0-1	In-Situ	<0.00198	0.00692	<49.9	<49.9	<49.9	<49.9	<49.9	1,340
CFS1 @ 1'	7/8/2021	1	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,610
CFS2 @ 1'	7/8/2021	1	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	381
CFS3 @ 1'	7/8/2021	1	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	901
CFS4 @ 1'	7/8/2021	1	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,810
CFS5 @ 1'	7/8/2021	1	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	2,180
CFS6 @ 1'	7/8/2021	1	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	499
CFS7 @ 1'	7/8/2021	1	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	4,440
CFS8 @ 1'	7/8/2021	1	In-Situ	<0.00199	<0.00398	<49.9	103	103	<49.9	103	3,970
CFS9 @ 1'	7/8/2021	1	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,140
CFS10 @ 1'	7/8/2021	1	In-Situ	0.00581	0.289	<49.7	<49.7	<49.7	<49.7	<49.7	1,450

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

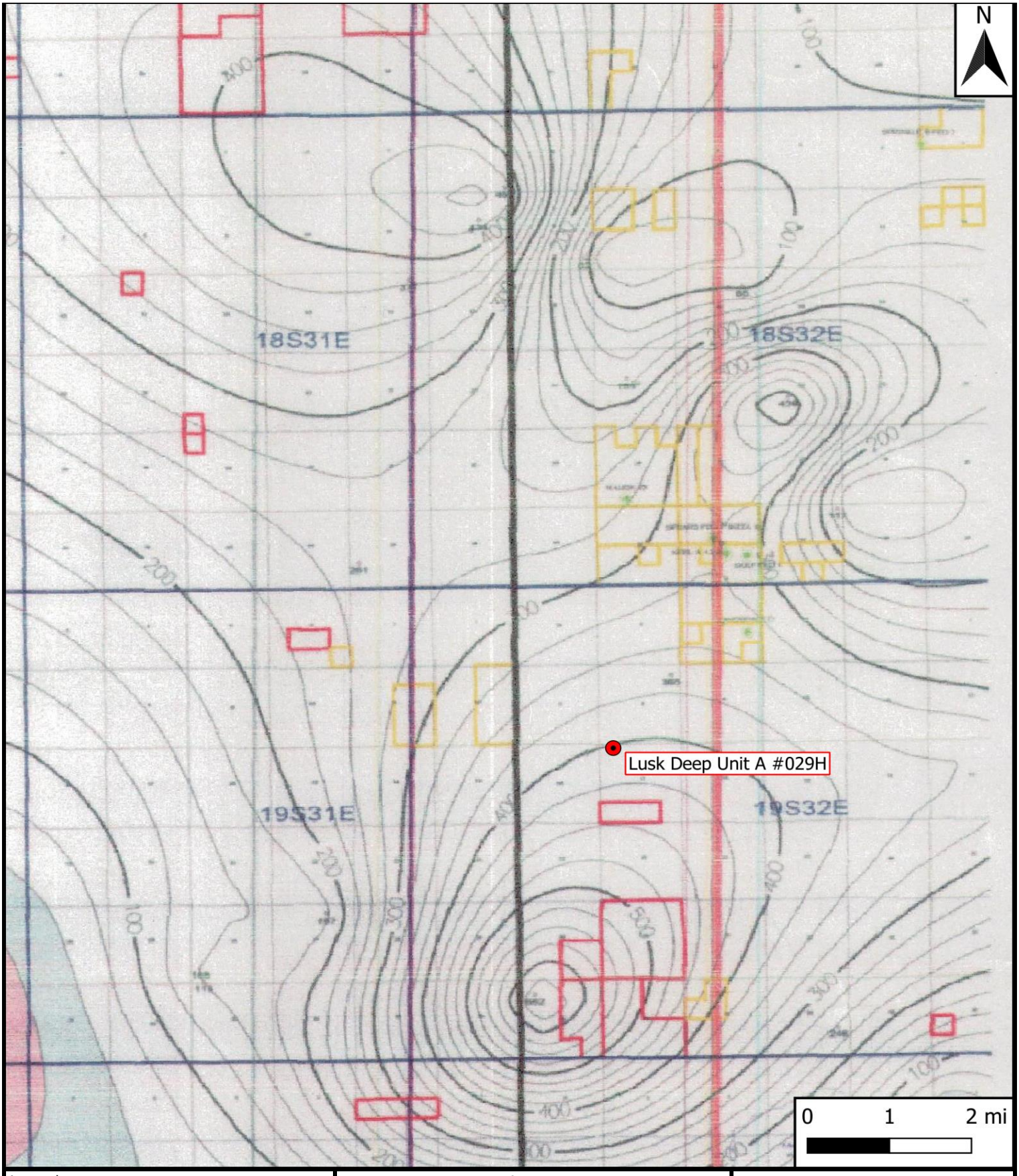
Appendix A
Depth to Groundwater Information

Groundwater Gauging Log

Project: Lusk Deep Unit A #029H
Project Number: 14391 Latitude: 32.6666 Longitude: -103.7943

Well ID	Date Measured	Top of Casing Elevation	Depth to Product	Depth to Water	PSH Thickness	Corrected Groundwater Elevation
Lusk Deep Unit A #029H TB - BH1	3/24/2021	-	N/A	83.8	N/A	-

- = Not measured
N/A = Not applicable



Legend

- Site Location

Figure 4

Inferred Depth to Groundwater Trend Map

COG Operating, LLC

Lusk Deep Unit A #029H

GPS: 32.6666, -103.7943

Lea County

eTECH Environmental & Safety Solutions, Inc.

Revised: bja

Checked: jwl Date: 7/9/21

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 01656 POD1	3	4	3	17	19S	32E	613368	3613646

Driller License:	1711	**Driller Company:**	STRAUB CORPORATION		
Driller Name:	EDWARD BRYAN				
Drill Start Date:	03/28/2017	**Drill Finish Date:**	03/28/2017	**Plug Date:**	03/28/2017
Log File Date:	05/05/2017	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	70 feet	**Depth Water:**	

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 01656 POD2	3	4	3	17	19S	32E	613364	3613648

Driller License: 1711 **Driller Company:** STRAUB CORPORATION

Driller Name: BRYAN, EDWARD

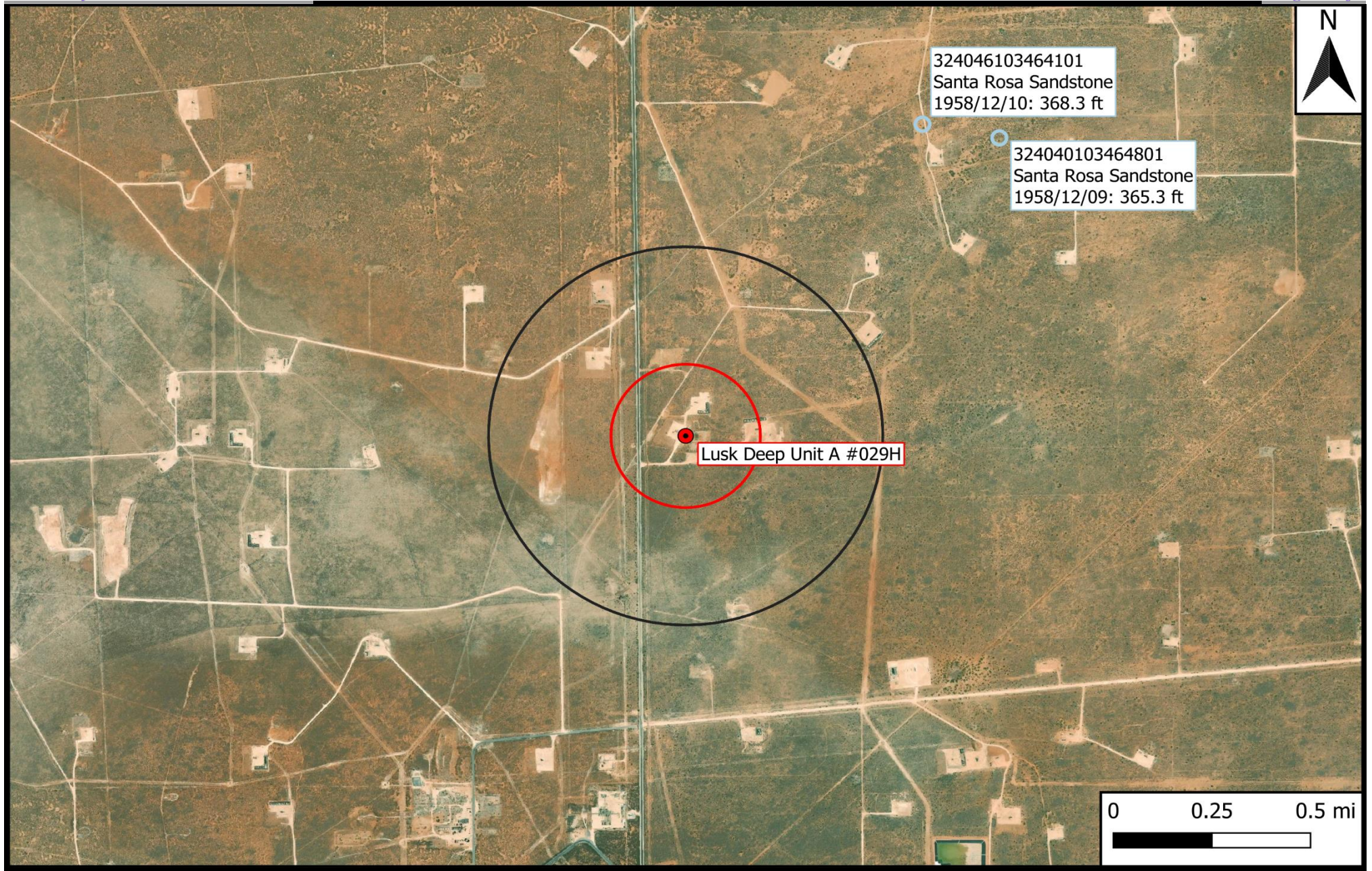
Drill Start Date:	03/28/2017	**Drill Finish Date:**	03/28/2017	**Plug Date:**	03/28/2017
Log File Date:	05/05/2017	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	70 feet	**Depth Water:**	

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 01656 POD3	3	4	3	17	19S	32E	613374	3613633

Driller License:	1711	**Driller Company:**	STRAUB CORPORATION		
Driller Name:	BRYAN, EDWARD				
Drill Start Date:	03/28/2017	**Drill Finish Date:**	03/28/2017	**Plug Date:**	03/28/2017
Log File Date:	05/05/2017	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	30 feet	**Depth Water:**	



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

Figure 5
USGS Well Proximity Map
COG Operating, LLC
Lusk Deep Unit A #029H
GPS: 32.6666, -103.7943
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 7/9/21

Click forNews Bulletins

Groundwater levels for the Nation

* IMPORTANT: Next Generation Station Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 324046103464101

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

USGS 324046103464101 19S.32E.08.2

Lea County, New Mexico
Latitude 32°40'42", Longitude 103°47'00" NAD27
Land-surface elevation 3,640 feet above NGVD29
This well is completed in the Other aquifers (N9999OTHER) national aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1958-12-10		D	72019	368.30			1	O	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	O	Observed.
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

Click forNews Bulletins

Groundwater levels for the Nation

* IMPORTANT: Next Generation Station Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 324040103464801

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

USGS 324040103464801 19S.32E.08.22411

Lea County, New Mexico
Latitude 32°40'40", Longitude 103°46'48" NAD27
Land-surface elevation 3,640 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1958-12-09		D	72019	365.30			1	Z			A

Explanation

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

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

Accessibility FOIA Privacy Policies and Notices

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

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

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-07-23 11:56:21 EDT
0.28 0.24 nadww02

Appendix B
Field Data & Soil Profile Logs

eTECH Environmental & Safety Solutions, Inc.

Sample Log

Date: 7-8-21

Project: Lusk Deep Unit A #029H

Project Number: 14391 Latitude: 32.6666 Longitude: -103.7943

Sample ID	PID/Odor	Chloride Conc.	GPS
WW1	–	4,636	
WW2	–	3,336	
CFS1e1'	–	2,528	
CFS2e1	–	636	
CFS3e1	–	1432	
CFS4e1	–	1884	
EW1	–	1,088	
EW2	–	1536	
NW1	–	5,028	
NW2	–	1,700	
NW3	–	940	
CFS5e1'	–	5452	
CFS6e1'	–	1884	
CFS7e1'	–	5452	
CFS8e1	–	3936	
CFS9e1	–	2148	
SW1	–	1536	
SW2	–	1252	
SW3	–	1432	
WW3	–	352	
WW4	–	1,644	
CFS10e1'	–	2,340	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

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

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

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

eTECH Environmental & Safety Solutions, Inc.

Soil Profile

Date:

Project: Lusk Deep Unit A #029H

Project Number: 14391 Latitude: 32.6666 Longitude: -103.7943

Depth (ft. bgs)	Description
1	Light caliche
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
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27	
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29	
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35	
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38	
39	
40	

Environmental & Safety Solutions, Inc.

Soil Boring/Temporary Monitor Well BH-1

Company: COG Operating, LLC	**Well/Borehole ID:** BH-1	**Drilling Company:** Scarborough Drilling, Inc.
Site: Lusk Deep Unit A #029H	**Coordinates (NAD 83):** 32.668053,-103.794006	**Driller:** L. Scarborough
NMOCD Reference #: nRM2020236260	**Drilling Date:** 3/17/2021	**Drilling Method:** Air Rotary
Location: Lea Co., NM	**Depth of Boring (ft):** 105	**Logged By:** L. Scarborough
PLSS: UL 'M' (SW/SW), Sec. 8, T19S, R32E	**Depth to Groundwater (ft):** 83.8	**Drafted By:** B. Arguijo
	Plugging Date: 3/24/2021	**Draft Date:** 7/29/2021

Completion: N/A **Casing:** N/A **Screen:** N/A

Comments: N/A

Depth (ft)	Groundwater	Lithology	Material Description	Chloride Field Test	Lab	PID	Well Construction
0			Caliche	-	-	-	
5			Topsoil	-	-	-	
10				-	-	-	
15			Caliche	-	-	-	
20				-	-	-	
25			Sandy clay	-	-	-	
30				-	-	-	
35				-	-	-	
40				-	-	-	
45				-	-	-	
50				-	-	-	
55			Red clay	-	-	-	
60				-	-	-	
65				-	-	-	
70			Sand	-	-	-	
75				-	-	-	
80				-	-	-	
85	▽			-	-	-	▽
90			Red clay	-	-	-	
95				-	-	-	
100				-	-	-	
105				-	-	-	
110			Notes: Lines between material types represent approximate boundaries. Actual transitions may be gradual.				
115							

Bentonite

Disclaimer This bore log is intended for environmental not geotechnical purposes.

Appendix C
Laboratory Analytical Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-4010-1
Laboratory Sample Delivery Group: 14391
Client Project/Site: Lusk Deep Unit A #029

For:
Etech Environmental & Safety Solutions
PO BOX 62228
Midland, Texas 79711

Attn: PM List

JKramer

Authorized for release by:
7/16/2021 7:03:07 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Laboratory Job ID: 880-4010-1
SDG: 14391

Table of Contents

Definitions/Glossary

Client: Etech Environmental & Safety Solutions Job ID: 880-4010-1
Project/Site: Lusk Deep Unit A #029 SDG: 14391

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Job ID: 880-4010-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-4010-1

Receipt
The samples were received on 7/15/2021 8:34 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-5271 and analytical batch 880-5270 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-4010-1
Project/Site: Lusk Deep Unit A #029
SDG: 14391

Client Sample ID: SW1
Lab Sample ID: 880-4010-1
Date Collected: 07/08/21 00:00
Matrix: Solid
Date Received: 07/15/21 08:34

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 17:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 17:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 17:18	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/15/21 09:22	07/15/21 17:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 17:18	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/15/21 09:22	07/15/21 17:18	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/15/21 09:22	07/15/21 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*07/15/21 09:22*	*07/15/21 17:18*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/15/21 09:22*	*07/15/21 17:18*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 13:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 13:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 13:25	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*07/15/21 10:01*	*07/15/21 13:25*	*1*
o-Terphenyl	*118*		*70 - 130*	*07/15/21 10:01*	*07/15/21 13:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1290**		5.04		mg/Kg			07/15/21 20:48	1

Client Sample ID: SW2
Lab Sample ID: 880-4010-2
Date Collected: 07/08/21 00:00
Matrix: Solid
Date Received: 07/15/21 08:34

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/15/21 09:22	07/15/21 17:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/15/21 09:22	07/15/21 17:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/15/21 09:22	07/15/21 17:38	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/15/21 09:22	07/15/21 17:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/15/21 09:22	07/15/21 17:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/15/21 09:22	07/15/21 17:38	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/15/21 09:22	07/15/21 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*07/15/21 09:22*	*07/15/21 17:38*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*07/15/21 09:22*	*07/15/21 17:38*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/15/21 10:01	07/15/21 14:27	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: SW2

Lab Sample ID: 880-4010-2
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	**81.7**		49.8		mg/Kg		07/15/21 10:01	07/15/21 14:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/15/21 10:01	07/15/21 14:27	1
Total TPH	**81.7**		49.8		mg/Kg		07/15/21 10:01	07/15/21 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*07/15/21 10:01*	*07/15/21 14:27*	*1*
o-Terphenyl	*113*		*70 - 130*	*07/15/21 10:01*	*07/15/21 14:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**380**		4.99		mg/Kg			07/15/21 21:22	1

Client Sample ID: SW3

Lab Sample ID: 880-4010-3
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/15/21 09:22	07/15/21 17:59	1
Toluene	**0.0218**		0.00201		mg/Kg		07/15/21 09:22	07/15/21 17:59	1
Ethylbenzene	**0.00951**		0.00201		mg/Kg		07/15/21 09:22	07/15/21 17:59	1
m-Xylene & p-Xylene	**0.0828**		0.00402		mg/Kg		07/15/21 09:22	07/15/21 17:59	1
o-Xylene	**0.0725**		0.00201		mg/Kg		07/15/21 09:22	07/15/21 17:59	1
Xylenes, Total	**0.155**		0.00402		mg/Kg		07/15/21 09:22	07/15/21 17:59	1
Total BTEX	**0.187**		0.00402		mg/Kg		07/15/21 09:22	07/15/21 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*626*	*S1+*	*70 - 130*	*07/15/21 09:22*	*07/15/21 17:59*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*07/15/21 09:22*	*07/15/21 17:59*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 15:04	1
Diesel Range Organics (Over C10-C28)	**297**		50.0		mg/Kg		07/15/21 10:01	07/15/21 15:04	1
Oil Range Organics (Over C28-C36)	**69.3**		50.0		mg/Kg		07/15/21 10:01	07/15/21 15:04	1
Total TPH	**366**		50.0		mg/Kg		07/15/21 10:01	07/15/21 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*07/15/21 10:01*	*07/15/21 15:04*	*1*
o-Terphenyl	*116*		*70 - 130*	*07/15/21 10:01*	*07/15/21 15:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**943**		4.96		mg/Kg			07/15/21 21:27	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: NW1

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 18:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 18:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 18:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/15/21 09:22	07/15/21 18:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 18:20	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/15/21 09:22	07/15/21 18:20	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/15/21 09:22	07/15/21 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*07/15/21 09:22*	*07/15/21 18:20*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*07/15/21 09:22*	*07/15/21 18:20*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 15:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 15:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 15:25	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*07/15/21 10:01*	*07/15/21 15:25*	*1*
o-Terphenyl	*119*		*70 - 130*	*07/15/21 10:01*	*07/15/21 15:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4700**		24.8		mg/Kg			07/15/21 21:33	5

Client Sample ID: NW2

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-5
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/15/21 09:22	07/15/21 18:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/15/21 09:22	07/15/21 18:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/15/21 09:22	07/15/21 18:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/15/21 09:22	07/15/21 18:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/15/21 09:22	07/15/21 18:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/15/21 09:22	07/15/21 18:41	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/15/21 09:22	07/15/21 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*07/15/21 09:22*	*07/15/21 18:41*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*07/15/21 09:22*	*07/15/21 18:41*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/15/21 10:01	07/15/21 15:46	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: NW2

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-5
Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/15/21 10:01	07/15/21 15:46	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/15/21 10:01	07/15/21 15:46	1
Total TPH	<49.8	U	49.8		mg/Kg		07/15/21 10:01	07/15/21 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*07/15/21 10:01*	*07/15/21 15:46*	*1*
o-Terphenyl	*102*		*70 - 130*	*07/15/21 10:01*	*07/15/21 15:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1900**		25.0		mg/Kg			07/15/21 21:38	5

Client Sample ID: NW3

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-6
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 19:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 19:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 19:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/15/21 09:22	07/15/21 19:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 19:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/15/21 09:22	07/15/21 19:01	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/15/21 09:22	07/15/21 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*07/15/21 09:22*	*07/15/21 19:01*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*07/15/21 09:22*	*07/15/21 19:01*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		07/15/21 10:01	07/15/21 16:07	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/15/21 10:01	07/15/21 16:07	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/15/21 10:01	07/15/21 16:07	1
Total TPH	<49.7	U	49.7		mg/Kg		07/15/21 10:01	07/15/21 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*07/15/21 10:01*	*07/15/21 16:07*	*1*
o-Terphenyl	*115*		*70 - 130*	*07/15/21 10:01*	*07/15/21 16:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**698**		5.05		mg/Kg			07/15/21 21:55	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-4010-1
Project/Site: Lusk Deep Unit A #029
SDG: 14391

Client Sample ID: EW1
Lab Sample ID: 880-4010-7
Date Collected: 07/08/21 00:00
Matrix: Solid
Date Received: 07/15/21 08:34

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/15/21 09:22	07/15/21 19:22	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/15/21 09:22	07/15/21 19:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/15/21 09:22	07/15/21 19:22	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		07/15/21 09:22	07/15/21 19:22	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/15/21 09:22	07/15/21 19:22	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/15/21 09:22	07/15/21 19:22	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		07/15/21 09:22	07/15/21 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*07/15/21 09:22*	*07/15/21 19:22*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/15/21 09:22*	*07/15/21 19:22*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 16:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 16:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 16:28	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*07/15/21 10:01*	*07/15/21 16:28*	*1*
o-Terphenyl	*107*		*70 - 130*	*07/15/21 10:01*	*07/15/21 16:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**821**		5.03		mg/Kg			07/15/21 22:00	1

Client Sample ID: EW2
Lab Sample ID: 880-4010-8
Date Collected: 07/08/21 00:00
Matrix: Solid
Date Received: 07/15/21 08:34

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 19:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 19:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 19:43	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/15/21 09:22	07/15/21 19:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 19:43	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/15/21 09:22	07/15/21 19:43	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/15/21 09:22	07/15/21 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*07/15/21 09:22*	*07/15/21 19:43*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/15/21 09:22*	*07/15/21 19:43*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 16:49	1

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Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: EW2

Lab Sample ID: 880-4010-8
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 16:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 16:49	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*07/15/21 10:01*	*07/15/21 16:49*	*1*
o-Terphenyl	*104*		*70 - 130*	*07/15/21 10:01*	*07/15/21 16:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1840**		25.1		mg/Kg			07/15/21 22:06	5

Client Sample ID: WW1

Lab Sample ID: 880-4010-9
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/16/21 08:35	07/16/21 13:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/16/21 08:35	07/16/21 13:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/16/21 08:35	07/16/21 13:39	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/16/21 08:35	07/16/21 13:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/16/21 08:35	07/16/21 13:39	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/16/21 08:35	07/16/21 13:39	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		07/16/21 08:35	07/16/21 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*07/16/21 08:35*	*07/16/21 13:39*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*07/16/21 08:35*	*07/16/21 13:39*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 17:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 17:09	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 17:09	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*07/15/21 10:01*	*07/15/21 17:09*	*1*
o-Terphenyl	*105*		*70 - 130*	*07/15/21 10:01*	*07/15/21 17:09*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**235**		5.00		mg/Kg			07/15/21 22:11	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: WW2

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-10
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 13:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 13:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 13:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/16/21 08:35	07/16/21 13:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 13:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/16/21 08:35	07/16/21 13:59	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/16/21 08:35	07/16/21 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*07/16/21 08:35*	*07/16/21 13:59*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*07/16/21 08:35*	*07/16/21 13:59*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 17:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 17:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 17:30	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*07/15/21 10:01*	*07/15/21 17:30*	*1*
o-Terphenyl	*104*		*70 - 130*	*07/15/21 10:01*	*07/15/21 17:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1210**		4.98		mg/Kg			07/15/21 22:17	1

Client Sample ID: WW3

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-11
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 14:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 14:20	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 14:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/16/21 08:35	07/16/21 14:20	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 14:20	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/16/21 08:35	07/16/21 14:20	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/16/21 08:35	07/16/21 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*07/16/21 08:35*	*07/16/21 14:20*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*07/16/21 08:35*	*07/16/21 14:20*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 18:11	1

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Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: WW3

Lab Sample ID: 880-4010-11
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	**74.1**		50.0		mg/Kg		07/15/21 10:01	07/15/21 18:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 18:11	1
Total TPH	**74.1**		50.0		mg/Kg		07/15/21 10:01	07/15/21 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*07/15/21 10:01*	*07/15/21 18:11*	*1*
o-Terphenyl	*116*		*70 - 130*	*07/15/21 10:01*	*07/15/21 18:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**170**		4.95		mg/Kg			07/15/21 22:22	1

Client Sample ID: CFS1 @ 1'

Lab Sample ID: 880-4010-12
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 14:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 14:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 14:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/16/21 08:35	07/16/21 14:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 14:40	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/16/21 08:35	07/16/21 14:40	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/16/21 08:35	07/16/21 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*07/16/21 08:35*	*07/16/21 14:40*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*07/16/21 08:35*	*07/16/21 14:40*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 18:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 18:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 18:32	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*07/15/21 10:01*	*07/15/21 18:32*	*1*
o-Terphenyl	*104*		*70 - 130*	*07/15/21 10:01*	*07/15/21 18:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1610**		25.1		mg/Kg			07/15/21 22:39	5

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: CFS2 @ 1'

Lab Sample ID: 880-4010-13
Matrix: Solid

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/16/21 08:35	07/16/21 15:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/16/21 08:35	07/16/21 15:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/16/21 08:35	07/16/21 15:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/16/21 08:35	07/16/21 15:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/16/21 08:35	07/16/21 15:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/16/21 08:35	07/16/21 15:01	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/16/21 08:35	07/16/21 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*07/16/21 08:35*	*07/16/21 15:01*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*07/16/21 08:35*	*07/16/21 15:01*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 18:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 18:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 18:53	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*07/15/21 10:01*	*07/15/21 18:53*	*1*
o-Terphenyl	*121*		*70 - 130*	*07/15/21 10:01*	*07/15/21 18:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**381**		5.04		mg/Kg			07/15/21 22:44	1

Client Sample ID: CFS3 @ 1'

Lab Sample ID: 880-4010-14
Matrix: Solid

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 15:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 15:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 15:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/16/21 08:35	07/16/21 15:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 15:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/16/21 08:35	07/16/21 15:21	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/16/21 08:35	07/16/21 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*07/16/21 08:35*	*07/16/21 15:21*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*07/16/21 08:35*	*07/16/21 15:21*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: CFS3 @ 1'

Lab Sample ID: 880-4010-14
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 19:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 19:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 19:14	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*07/15/21 10:01*	*07/15/21 19:14*	*1*
o-Terphenyl	*105*		*70 - 130*	*07/15/21 10:01*	*07/15/21 19:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**901**		5.03		mg/Kg			07/15/21 23:01	1

Client Sample ID: CFS4 @ 1'

Lab Sample ID: 880-4010-15
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/16/21 08:35	07/16/21 15:41	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/16/21 08:35	07/16/21 15:41	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/16/21 08:35	07/16/21 15:41	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/16/21 08:35	07/16/21 15:41	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/16/21 08:35	07/16/21 15:41	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/16/21 08:35	07/16/21 15:41	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		07/16/21 08:35	07/16/21 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*07/16/21 08:35*	*07/16/21 15:41*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*07/16/21 08:35*	*07/16/21 15:41*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 19:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 19:35	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 19:35	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*07/15/21 10:01*	*07/15/21 19:35*	*1*
o-Terphenyl	*120*		*70 - 130*	*07/15/21 10:01*	*07/15/21 19:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1810**		25.2		mg/Kg			07/15/21 23:06	5

Eurofins Xenco, Midland

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: CFS5 @ 1'

Lab Sample ID: 880-4010-16
Matrix: Solid

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 16:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 16:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 16:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/16/21 08:35	07/16/21 16:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/16/21 08:35	07/16/21 16:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/16/21 08:35	07/16/21 16:02	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/16/21 08:35	07/16/21 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*07/16/21 08:35*	*07/16/21 16:02*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*07/16/21 08:35*	*07/16/21 16:02*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 19:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 19:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 19:56	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*07/15/21 10:01*	*07/15/21 19:56*	*1*
o-Terphenyl	*102*		*70 - 130*	*07/15/21 10:01*	*07/15/21 19:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2180**		25.2		mg/Kg			07/15/21 23:12	5

Client Sample ID: CFS6 @ 1'

Lab Sample ID: 880-4010-17
Matrix: Solid

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 16:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 16:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 16:22	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/16/21 08:35	07/16/21 16:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 16:22	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/16/21 08:35	07/16/21 16:22	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/16/21 08:35	07/16/21 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*07/16/21 08:35*	*07/16/21 16:22*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*07/16/21 08:35*	*07/16/21 16:22*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: CFS6 @ 1'

Lab Sample ID: 880-4010-17
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 20:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 20:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 20:17	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*07/15/21 10:01*	*07/15/21 20:17*	*1*
o-Terphenyl	*105*		*70 - 130*	*07/15/21 10:01*	*07/15/21 20:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**499**		4.97		mg/Kg			07/15/21 23:17	1

Client Sample ID: CFS7 @ 1'

Lab Sample ID: 880-4010-18
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/16/21 08:35	07/16/21 16:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/16/21 08:35	07/16/21 16:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/16/21 08:35	07/16/21 16:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/16/21 08:35	07/16/21 16:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/16/21 08:35	07/16/21 16:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/16/21 08:35	07/16/21 16:43	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/16/21 08:35	07/16/21 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*07/16/21 08:35*	*07/16/21 16:43*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*07/16/21 08:35*	*07/16/21 16:43*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 20:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 20:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 20:37	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*07/15/21 10:01*	*07/15/21 20:37*	*1*
o-Terphenyl	*105*		*70 - 130*	*07/15/21 10:01*	*07/15/21 20:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4440**		24.8		mg/Kg			07/15/21 23:23	5

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: CFS8 @ 1'

Lab Sample ID: 880-4010-19
Matrix: Solid

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/16/21 09:44	07/16/21 12:58	1
Toluene	<0.00199	U F1 F2	0.00199		mg/Kg		07/16/21 09:44	07/16/21 12:58	1
Ethylbenzene	<0.00199	U F1 F2	0.00199		mg/Kg		07/16/21 09:44	07/16/21 12:58	1
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.00398		mg/Kg		07/16/21 09:44	07/16/21 12:58	1
o-Xylene	<0.00199	U F1 F2	0.00199		mg/Kg		07/16/21 09:44	07/16/21 12:58	1
Xylenes, Total	<0.00398	U F1 F2	0.00398		mg/Kg		07/16/21 09:44	07/16/21 12:58	1
Total BTEX	<0.00398	U F1 F2	0.00398		mg/Kg		07/16/21 09:44	07/16/21 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*07/16/21 09:44*	*07/16/21 12:58*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*07/16/21 09:44*	*07/16/21 12:58*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 20:58	1
Diesel Range Organics (Over C10-C28)	**103**		49.9		mg/Kg		07/15/21 10:01	07/15/21 20:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 10:01	07/15/21 20:58	1
Total TPH	**103**		49.9		mg/Kg		07/15/21 10:01	07/15/21 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*07/15/21 10:01*	*07/15/21 20:58*	*1*
o-Terphenyl	*97*		*70 - 130*	*07/15/21 10:01*	*07/15/21 20:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3970**		25.3		mg/Kg			07/16/21 00:17	5

Client Sample ID: CFS9 @ 1'

Lab Sample ID: 880-4010-20
Matrix: Solid

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/16/21 09:44	07/16/21 13:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/16/21 09:44	07/16/21 13:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/16/21 09:44	07/16/21 13:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/16/21 09:44	07/16/21 13:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/16/21 09:44	07/16/21 13:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/16/21 09:44	07/16/21 13:19	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/16/21 09:44	07/16/21 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*07/16/21 09:44*	*07/16/21 13:19*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*07/16/21 09:44*	*07/16/21 13:19*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: CFS9 @ 1'

Lab Sample ID: 880-4010-20
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 21:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 21:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 21:19	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*07/15/21 10:01*	*07/15/21 21:19*	*1*
o-Terphenyl	*107*		*70 - 130*	*07/15/21 10:01*	*07/15/21 21:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2140**		25.0		mg/Kg			07/16/21 00:34	5

Client Sample ID: CFS10 @ 1'

Lab Sample ID: 880-4010-21
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34
Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00581**		0.00199		mg/Kg		07/15/21 09:28	07/16/21 00:16	1
Toluene	**0.0735**		0.00199		mg/Kg		07/15/21 09:28	07/16/21 00:16	1
Ethylbenzene	**0.0128**		0.00199		mg/Kg		07/15/21 09:28	07/16/21 00:16	1
m-Xylene & p-Xylene	**0.157**		0.00398		mg/Kg		07/15/21 09:28	07/16/21 00:16	1
o-Xylene	**0.0401**		0.00199		mg/Kg		07/15/21 09:28	07/16/21 00:16	1
Xylenes, Total	**0.197**		0.00398		mg/Kg		07/15/21 09:28	07/16/21 00:16	1
Total BTEX	**0.289**		0.00398		mg/Kg		07/15/21 09:28	07/16/21 00:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*212*	*S1+*	*70 - 130*	*07/15/21 09:28*	*07/16/21 00:16*	*1*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*	*07/15/21 09:28*	*07/16/21 00:16*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		07/15/21 11:00	07/15/21 16:07	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/15/21 11:00	07/15/21 16:07	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/15/21 11:00	07/15/21 16:07	1
Total TPH	<49.7	U	49.7		mg/Kg		07/15/21 11:00	07/15/21 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*07/15/21 11:00*	*07/15/21 16:07*	*1*
o-Terphenyl	*119*		*70 - 130*	*07/15/21 11:00*	*07/15/21 16:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1450**		24.8		mg/Kg			07/16/21 00:39	5

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: WW4

Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-22

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/15/21 09:28	07/16/21 00:36	1
Toluene	**0.00247**		0.00198		mg/Kg		07/15/21 09:28	07/16/21 00:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/15/21 09:28	07/16/21 00:36	1
m-Xylene & p-Xylene	**0.00445**		0.00397		mg/Kg		07/15/21 09:28	07/16/21 00:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/15/21 09:28	07/16/21 00:36	1
Xylenes, Total	**0.00445**		0.00397		mg/Kg		07/15/21 09:28	07/16/21 00:36	1
Total BTEX	**0.00692**		0.00397		mg/Kg		07/15/21 09:28	07/16/21 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*07/15/21 09:28*	*07/16/21 00:36*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*07/15/21 09:28*	*07/16/21 00:36*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 11:00	07/15/21 16:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 11:00	07/15/21 16:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 11:00	07/15/21 16:28	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 11:00	07/15/21 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*07/15/21 11:00*	*07/15/21 16:28*	*1*
o-Terphenyl	*127*		*70 - 130*	*07/15/21 11:00*	*07/15/21 16:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1340**		25.2		mg/Kg			07/16/21 00:45	5

Surrogate Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-4010-1	SW1	100	96
880-4010-1 MS	SW1	102	87
880-4010-1 MSD	SW1	101	96
880-4010-2	SW2	118	115
880-4010-3	SW3	626 S1+	73
880-4010-4	NW1	112	119
880-4010-5	NW2	117	114
880-4010-6	NW3	99	98
880-4010-7	EW1	102	101
880-4010-8	EW2	100	99
880-4010-9	WW1	105	103
880-4010-9 MS	WW1	103	107
880-4010-9 MSD	WW1	117	103
880-4010-10	WW2	96	110
880-4010-11	WW3	96	114
880-4010-12	CFS1 @ 1'	100	109
880-4010-13	CFS2 @ 1'	105	92
880-4010-14	CFS3 @ 1'	114	108
880-4010-15	CFS4 @ 1'	109	112
880-4010-16	CFS5 @ 1'	128	104
880-4010-17	CFS6 @ 1'	112	107
880-4010-18	CFS7 @ 1'	96	111
880-4010-19	CFS8 @ 1'	98	107
880-4010-19 MS	CFS8 @ 1'	211 S1+	92
880-4010-19 MSD	CFS8 @ 1'	103	93
880-4010-20	CFS9 @ 1'	124	116
880-4010-21	CFS10 @ 1'	212 S1+	121
880-4010-22	WW4	101	110
LCS 880-5209/1-A	Lab Control Sample	119	107
LCS 880-5210/1-A	Lab Control Sample	108	106
LCS 880-5264/1-A	Lab Control Sample	97	108
LCS 880-5271/1-A	Lab Control Sample	99	104
LCSD 880-5209/2-A	Lab Control Sample Dup	99	99
LCSD 880-5210/2-A	Lab Control Sample Dup	102	106
LCSD 880-5264/2-A	Lab Control Sample Dup	103	111
LCSD 880-5271/2-A	Lab Control Sample Dup	98	96
MB 880-5209/5-A	Method Blank	111	91
MB 880-5210/5-A	Method Blank	107	92
MB 880-5264/5-A	Method Blank	99	99
MB 880-5271/5-A	Method Blank	106	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Etech Environmental & Safety Solutions Job ID: 880-4010-1
Project/Site: Lusk Deep Unit A #029 SDG: 14391

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
880-4010-1	SW1	110	118								
880-4010-1 MS	SW1	89	87								
880-4010-1 MSD	SW1	89	84								
880-4010-2	SW2	107	113								
880-4010-3	SW3	108	116								
880-4010-4	NW1	111	119								
880-4010-5	NW2	93	102								
880-4010-6	NW3	106	115								
880-4010-7	EW1	100	107								
880-4010-8	EW2	95	104								
880-4010-9	WW1	98	105								
880-4010-10	WW2	96	104								
880-4010-11	WW3	105	116								
880-4010-12	CFS1 @ 1'	96	104								
880-4010-13	CFS2 @ 1'	110	121								
880-4010-14	CFS3 @ 1'	96	105								
880-4010-15	CFS4 @ 1'	110	120								
880-4010-16	CFS5 @ 1'	93	102								
880-4010-17	CFS6 @ 1'	95	105								
880-4010-18	CFS7 @ 1'	94	105								
880-4010-19	CFS8 @ 1'	90	97								
880-4010-20	CFS9 @ 1'	96	107								
880-4010-21	CFS10 @ 1'	98	119								
880-4010-22	WW4	106	127								
LCS 880-5199/2-A	Lab Control Sample	100	107								
LCS 880-5213/2-A	Lab Control Sample	115	116								
LCSD 880-5199/3-A	Lab Control Sample Dup	103	114								
LCSD 880-5213/3-A	Lab Control Sample Dup	123	122								
MB 880-5199/1-A	Method Blank	92	108								
MB 880-5213/1-A	Method Blank	84	91								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5209/5-A
Matrix: Solid
Analysis Batch: 5231

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5209

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 16:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 16:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 16:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/15/21 09:22	07/15/21 16:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:22	07/15/21 16:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/15/21 09:22	07/15/21 16:56	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/15/21 09:22	07/15/21 16:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*07/15/21 09:22*	*07/15/21 16:56*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*07/15/21 09:22*	*07/15/21 16:56*	*1*

Lab Sample ID: LCS 880-5209/1-A
Matrix: Solid
Analysis Batch: 5231

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5209

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1182		mg/Kg		118	70 - 130		
Toluene			0.100	0.1077		mg/Kg		108	70 - 130		
Ethylbenzene			0.100	0.1140		mg/Kg		114	70 - 130		
m-Xylene & p-Xylene			0.200	0.2283		mg/Kg		114	70 - 130		
o-Xylene			0.100	0.1077		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-5209/2-A
Matrix: Solid
Analysis Batch: 5231

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5209

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09636		mg/Kg		96	70 - 130	20	35
Toluene			0.100	0.08809		mg/Kg		88	70 - 130	20	35
Ethylbenzene			0.100	0.09288		mg/Kg		93	70 - 130	20	35
m-Xylene & p-Xylene			0.200	0.1872		mg/Kg		94	70 - 130	20	35
o-Xylene			0.100	0.08646		mg/Kg		86	70 - 130	22	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-4010-1 MS
Matrix: Solid
Analysis Batch: 5231

Client Sample ID: SW1
Prep Type: Total/NA
Prep Batch: 5209

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.0998	0.08052		mg/Kg		81	70 - 130		

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-4010-1 MS
Matrix: Solid
Analysis Batch: 5231

Client Sample ID: SW1
Prep Type: Total/NA
Prep Batch: 5209

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U	0.0998	0.07945		mg/Kg		80	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.08510		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1716		mg/Kg		86	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08533		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 880-4010-1 MSD
Matrix: Solid
Analysis Batch: 5231

Client Sample ID: SW1
Prep Type: Total/NA
Prep Batch: 5209

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.09171		mg/Kg		92	70 - 130	13	35
Toluene	<0.00200	U	0.100	0.08425		mg/Kg		84	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.100	0.08571		mg/Kg		86	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1720		mg/Kg		86	70 - 130	0	35
o-Xylene	<0.00200	U	0.100	0.08592		mg/Kg		86	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 880-5210/5-A
Matrix: Solid
Analysis Batch: 5230

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5210

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:28	07/15/21 16:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:28	07/15/21 16:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:28	07/15/21 16:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/15/21 09:28	07/15/21 16:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/15/21 09:28	07/15/21 16:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/15/21 09:28	07/15/21 16:47	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/15/21 09:28	07/15/21 16:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/15/21 09:28*	*07/15/21 16:47*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*07/15/21 09:28*	*07/15/21 16:47*	*1*

Lab Sample ID: LCS 880-5210/1-A
Matrix: Solid
Analysis Batch: 5230

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5210

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09262		mg/Kg		93	70 - 130
Toluene	0.100	0.08625		mg/Kg		86	70 - 130

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-5210/1-A
Matrix: Solid
Analysis Batch: 5230

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5210

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylbenzene			0.100	0.08897		mg/Kg		89	70 - 130		
m-Xylene & p-Xylene			0.200	0.1835		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09241		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-5210/2-A
Matrix: Solid
Analysis Batch: 5230

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5210

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08965		mg/Kg		90	70 - 130	3	35
Toluene			0.100	0.08275		mg/Kg		83	70 - 130	4	35
Ethylbenzene			0.100	0.08506		mg/Kg		85	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1748		mg/Kg		87	70 - 130	5	35
o-Xylene			0.100	0.08771		mg/Kg		88	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: MB 880-5264/5-A
Matrix: Solid
Analysis Batch: 5266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5264

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 13:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 13:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 13:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/16/21 08:35	07/16/21 13:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/16/21 08:35	07/16/21 13:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/16/21 08:35	07/16/21 13:17	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/16/21 08:35	07/16/21 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*07/16/21 08:35*	*07/16/21 13:17*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/16/21 08:35*	*07/16/21 13:17*	*1*

Lab Sample ID: LCS 880-5264/1-A
Matrix: Solid
Analysis Batch: 5266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5264

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1020		mg/Kg		102	70 - 130		
Toluene			0.100	0.09180		mg/Kg		92	70 - 130		
Ethylbenzene			0.100	0.08714		mg/Kg		87	70 - 130		

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-5264/1-A
Matrix: Solid
Analysis Batch: 5266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5264

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
m-Xylene & p-Xylene			0.200	0.1742		mg/Kg		87	70 - 130		
o-Xylene			0.100	0.08700		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-5264/2-A
Matrix: Solid
Analysis Batch: 5266

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5264

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1009		mg/Kg		101	70 - 130	1	35
Toluene			0.100	0.09008		mg/Kg		90	70 - 130	2	35
Ethylbenzene			0.100	0.08679		mg/Kg		87	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1782		mg/Kg		89	70 - 130	2	35
o-Xylene			0.100	0.08955		mg/Kg		90	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-4010-9 MS
Matrix: Solid
Analysis Batch: 5266

Client Sample ID: WW1
Prep Type: Total/NA
Prep Batch: 5264

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00202	U	0.0998	0.09560		mg/Kg		96	70 - 130		
Toluene	<0.00202	U	0.0998	0.08728		mg/Kg		87	70 - 130		
Ethylbenzene	<0.00202	U	0.0998	0.08032		mg/Kg		80	70 - 130		
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1652		mg/Kg		83	70 - 130		
o-Xylene	<0.00202	U	0.0998	0.08208		mg/Kg		82	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 880-4010-9 MSD
Matrix: Solid
Analysis Batch: 5266

Client Sample ID: WW1
Prep Type: Total/NA
Prep Batch: 5264

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.07682		mg/Kg		77	70 - 130	22	35
Toluene	<0.00202	U	0.100	0.08487		mg/Kg		85	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.100	0.07416		mg/Kg		74	70 - 130	8	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1666		mg/Kg		83	70 - 130	1	35
o-Xylene	<0.00202	U	0.100	0.08297		mg/Kg		83	70 - 130	1	35

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-4010-9 MSD
Matrix: Solid
Analysis Batch: 5266

Client Sample ID: WW1
Prep Type: Total/NA
Prep Batch: 5264

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 880-5271/5-A
Matrix: Solid
Analysis Batch: 5270

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5271

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/16/21 09:44	07/16/21 12:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/16/21 09:44	07/16/21 12:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/16/21 09:44	07/16/21 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/16/21 09:44	07/16/21 12:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/16/21 09:44	07/16/21 12:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/16/21 09:44	07/16/21 12:36	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/16/21 09:44	07/16/21 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*07/16/21 09:44*	*07/16/21 12:36*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*07/16/21 09:44*	*07/16/21 12:36*	*1*

Lab Sample ID: LCS 880-5271/1-A
Matrix: Solid
Analysis Batch: 5270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5271

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1190		mg/Kg		119	70 - 130		
Toluene			0.100	0.1072		mg/Kg		107	70 - 130		
Ethylbenzene			0.100	0.1043		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.2244		mg/Kg		112	70 - 130		
o-Xylene			0.100	0.1020		mg/Kg		102	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-5271/2-A
Matrix: Solid
Analysis Batch: 5270

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5271

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1085		mg/Kg		109	70 - 130	9	35
Toluene			0.100	0.09997		mg/Kg		100	70 - 130	7	35
Ethylbenzene			0.100	0.09789		mg/Kg		98	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2059		mg/Kg		103	70 - 130	9	35
o-Xylene			0.100	0.09449		mg/Kg		94	70 - 130	8	35

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-5271/2-A
Matrix: Solid
Analysis Batch: 5270

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5271

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-4010-19 MS
Matrix: Solid
Analysis Batch: 5270

Client Sample ID: CFS8 @ 1'
Prep Type: Total/NA
Prep Batch: 5271

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0992	0.09986		mg/Kg		100	70 - 130
Toluene	<0.00199	U F1 F2	0.0992	0.1447	F1	mg/Kg		146	70 - 130
Ethylbenzene	<0.00199	U F1 F2	0.0992	0.1652	F1	mg/Kg		166	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.198	0.3567	F1	mg/Kg		180	70 - 130
o-Xylene	<0.00199	U F1 F2	0.0992	0.1566	F1	mg/Kg		158	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	211	S1+	70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-4010-19 MSD
Matrix: Solid
Analysis Batch: 5270

Client Sample ID: CFS8 @ 1'
Prep Type: Total/NA
Prep Batch: 5271

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.1169		mg/Kg		115	70 - 130	16	35
Toluene	<0.00199	U F1 F2	0.101	0.09376	F2	mg/Kg		93	70 - 130	43	35
Ethylbenzene	<0.00199	U F1 F2	0.101	0.05516	F1 F2	mg/Kg		55	70 - 130	100	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.202	0.1853	F2	mg/Kg		92	70 - 130	63	35
o-Xylene	<0.00199	U F1 F2	0.101	0.08859	F2	mg/Kg		88	70 - 130	55	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-5199/1-A
Matrix: Solid
Analysis Batch: 5214

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/14/21 16:17	07/15/21 12:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/14/21 16:17	07/15/21 12:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/14/21 16:17	07/15/21 12:23	1
Total TPH	<50.0	U	50.0		mg/Kg		07/14/21 16:17	07/15/21 12:23	1

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-5199/1-A
Matrix: Solid
Analysis Batch: 5214

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5199

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	07/14/21 16:17	07/15/21 12:23	1
o-Terphenyl	108		70 - 130	07/14/21 16:17	07/15/21 12:23	1

Lab Sample ID: LCS 880-5199/2-A
Matrix: Solid
Analysis Batch: 5214

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5199

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	768.2		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	906.9		mg/Kg		91	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-5199/3-A
Matrix: Solid
Analysis Batch: 5214

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5199

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	770.2		mg/Kg		77	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	941.3		mg/Kg		94	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: MB 880-5213/1-A
Matrix: Solid
Analysis Batch: 5216

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5213

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 12:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 12:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 12:23	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 10:01	07/15/21 12:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	07/15/21 10:01	07/15/21 12:23	1
o-Terphenyl	91		70 - 130	07/15/21 10:01	07/15/21 12:23	1

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-5213/2-A
Matrix: Solid
Analysis Batch: 5216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5213

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	915.6		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1053		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: LCSD 880-5213/3-A
Matrix: Solid
Analysis Batch: 5216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5213

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	969.0		mg/Kg		97	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1130		mg/Kg		113	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*122*		*70 - 130*

Lab Sample ID: 880-4010-1 MS
Matrix: Solid
Analysis Batch: 5216

Client Sample ID: SW1
Prep Type: Total/NA
Prep Batch: 5213

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	909.0		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	996	957.2		mg/Kg		94	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*87*		*70 - 130*

Lab Sample ID: 880-4010-1 MSD
Matrix: Solid
Analysis Batch: 5216

Client Sample ID: SW1
Prep Type: Total/NA
Prep Batch: 5213

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	917.8		mg/Kg		92	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	952.7		mg/Kg		93	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-4010-1 MSD
Matrix: Solid
Analysis Batch: 5216

Client Sample ID: SW1
Prep Type: Total/NA
Prep Batch: 5213

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	84		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5224/1-A
Matrix: Solid
Analysis Batch: 5250

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/15/21 20:31	1

Lab Sample ID: LCS 880-5224/2-A
Matrix: Solid
Analysis Batch: 5250

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	260.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-5224/3-A
Matrix: Solid
Analysis Batch: 5250

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	260.5		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 880-4010-1 MS
Matrix: Solid
Analysis Batch: 5250

Client Sample ID: SW1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	1290		252	1494	4	mg/Kg		82	90 - 110		

Lab Sample ID: 880-4010-1 MSD
Matrix: Solid
Analysis Batch: 5250

Client Sample ID: SW1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1290		252	1482	4	mg/Kg		77	90 - 110	1	20

Lab Sample ID: 880-4010-11 MS
Matrix: Solid
Analysis Batch: 5250

Client Sample ID: WW3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	170		248	411.0		mg/Kg		97	90 - 110		

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-4010-11 MSD
Matrix: Solid
Analysis Batch: 5250

Client Sample ID: WW3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	170		248	409.5		mg/Kg		97	90 - 110	0	20

Lab Sample ID: MB 880-5225/1-A
Matrix: Solid
Analysis Batch: 5255

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/16/21 00:01	1

Lab Sample ID: LCS 880-5225/2-A
Matrix: Solid
Analysis Batch: 5255

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	259.9		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-5225/3-A
Matrix: Solid
Analysis Batch: 5255

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	261.1		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 880-4010-19 MS
Matrix: Solid
Analysis Batch: 5255

Client Sample ID: CFS8 @ 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3970		1260	5308		mg/Kg		106	90 - 110

Lab Sample ID: 880-4010-19 MSD
Matrix: Solid
Analysis Batch: 5255

Client Sample ID: CFS8 @ 1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3970		1260	5270		mg/Kg		103	90 - 110	1	20

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

GC VOA

Prep Batch: 5209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-1	SW1	Total/NA	Solid	5035	
880-4010-2	SW2	Total/NA	Solid	5035	
880-4010-3	SW3	Total/NA	Solid	5035	
880-4010-4	NW1	Total/NA	Solid	5035	
880-4010-5	NW2	Total/NA	Solid	5035	
880-4010-6	NW3	Total/NA	Solid	5035	
880-4010-7	EW1	Total/NA	Solid	5035	
880-4010-8	EW2	Total/NA	Solid	5035	
MB 880-5209/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5209/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5209/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-4010-1 MS	SW1	Total/NA	Solid	5035	
880-4010-1 MSD	SW1	Total/NA	Solid	5035	

Prep Batch: 5210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-21	CFS10 @ 1'	Total/NA	Solid	5035	
880-4010-22	WW4	Total/NA	Solid	5035	
MB 880-5210/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5210/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5210/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-21	CFS10 @ 1'	Total/NA	Solid	8021B	5210
880-4010-22	WW4	Total/NA	Solid	8021B	5210
MB 880-5210/5-A	Method Blank	Total/NA	Solid	8021B	5210
LCS 880-5210/1-A	Lab Control Sample	Total/NA	Solid	8021B	5210
LCSD 880-5210/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5210

Analysis Batch: 5231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-1	SW1	Total/NA	Solid	8021B	5209
880-4010-2	SW2	Total/NA	Solid	8021B	5209
880-4010-3	SW3	Total/NA	Solid	8021B	5209
880-4010-4	NW1	Total/NA	Solid	8021B	5209
880-4010-5	NW2	Total/NA	Solid	8021B	5209
880-4010-6	NW3	Total/NA	Solid	8021B	5209
880-4010-7	EW1	Total/NA	Solid	8021B	5209
880-4010-8	EW2	Total/NA	Solid	8021B	5209
MB 880-5209/5-A	Method Blank	Total/NA	Solid	8021B	5209
LCS 880-5209/1-A	Lab Control Sample	Total/NA	Solid	8021B	5209
LCSD 880-5209/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5209
880-4010-1 MS	SW1	Total/NA	Solid	8021B	5209
880-4010-1 MSD	SW1	Total/NA	Solid	8021B	5209

Prep Batch: 5264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-9	WW1	Total/NA	Solid	5035	
880-4010-10	WW2	Total/NA	Solid	5035	
880-4010-11	WW3	Total/NA	Solid	5035	

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

GC VOA (Continued)

Prep Batch: 5264 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-12	CFS1 @ 1'	Total/NA	Solid	5035	
880-4010-13	CFS2 @ 1'	Total/NA	Solid	5035	
880-4010-14	CFS3 @ 1'	Total/NA	Solid	5035	
880-4010-15	CFS4 @ 1'	Total/NA	Solid	5035	
880-4010-16	CFS5 @ 1'	Total/NA	Solid	5035	
880-4010-17	CFS6 @ 1'	Total/NA	Solid	5035	
880-4010-18	CFS7 @ 1'	Total/NA	Solid	5035	
MB 880-5264/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5264/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5264/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-4010-9 MS	WW1	Total/NA	Solid	5035	
880-4010-9 MSD	WW1	Total/NA	Solid	5035	

Analysis Batch: 5266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-9	WW1	Total/NA	Solid	8021B	5264
880-4010-10	WW2	Total/NA	Solid	8021B	5264
880-4010-11	WW3	Total/NA	Solid	8021B	5264
880-4010-12	CFS1 @ 1'	Total/NA	Solid	8021B	5264
880-4010-13	CFS2 @ 1'	Total/NA	Solid	8021B	5264
880-4010-14	CFS3 @ 1'	Total/NA	Solid	8021B	5264
880-4010-15	CFS4 @ 1'	Total/NA	Solid	8021B	5264
880-4010-16	CFS5 @ 1'	Total/NA	Solid	8021B	5264
880-4010-17	CFS6 @ 1'	Total/NA	Solid	8021B	5264
880-4010-18	CFS7 @ 1'	Total/NA	Solid	8021B	5264
MB 880-5264/5-A	Method Blank	Total/NA	Solid	8021B	5264
LCS 880-5264/1-A	Lab Control Sample	Total/NA	Solid	8021B	5264
LCSD 880-5264/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5264
880-4010-9 MS	WW1	Total/NA	Solid	8021B	5264
880-4010-9 MSD	WW1	Total/NA	Solid	8021B	5264

Analysis Batch: 5270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-19	CFS8 @ 1'	Total/NA	Solid	8021B	5271
880-4010-20	CFS9 @ 1'	Total/NA	Solid	8021B	5271
MB 880-5271/5-A	Method Blank	Total/NA	Solid	8021B	5271
LCS 880-5271/1-A	Lab Control Sample	Total/NA	Solid	8021B	5271
LCSD 880-5271/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5271
880-4010-19 MS	CFS8 @ 1'	Total/NA	Solid	8021B	5271
880-4010-19 MSD	CFS8 @ 1'	Total/NA	Solid	8021B	5271

Prep Batch: 5271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-19	CFS8 @ 1'	Total/NA	Solid	5035	
880-4010-20	CFS9 @ 1'	Total/NA	Solid	5035	
MB 880-5271/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5271/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5271/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-4010-19 MS	CFS8 @ 1'	Total/NA	Solid	5035	
880-4010-19 MSD	CFS8 @ 1'	Total/NA	Solid	5035	

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

GC Semi VOA

Prep Batch: 5199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-21	CFS10 @ 1'	Total/NA	Solid	8015NM Prep	
880-4010-22	WW4	Total/NA	Solid	8015NM Prep	
MB 880-5199/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5199/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5199/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 5213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-1	SW1	Total/NA	Solid	8015NM Prep	
880-4010-2	SW2	Total/NA	Solid	8015NM Prep	
880-4010-3	SW3	Total/NA	Solid	8015NM Prep	
880-4010-4	NW1	Total/NA	Solid	8015NM Prep	
880-4010-5	NW2	Total/NA	Solid	8015NM Prep	
880-4010-6	NW3	Total/NA	Solid	8015NM Prep	
880-4010-7	EW1	Total/NA	Solid	8015NM Prep	
880-4010-8	EW2	Total/NA	Solid	8015NM Prep	
880-4010-9	WW1	Total/NA	Solid	8015NM Prep	
880-4010-10	WW2	Total/NA	Solid	8015NM Prep	
880-4010-11	WW3	Total/NA	Solid	8015NM Prep	
880-4010-12	CFS1 @ 1'	Total/NA	Solid	8015NM Prep	
880-4010-13	CFS2 @ 1'	Total/NA	Solid	8015NM Prep	
880-4010-14	CFS3 @ 1'	Total/NA	Solid	8015NM Prep	
880-4010-15	CFS4 @ 1'	Total/NA	Solid	8015NM Prep	
880-4010-16	CFS5 @ 1'	Total/NA	Solid	8015NM Prep	
880-4010-17	CFS6 @ 1'	Total/NA	Solid	8015NM Prep	
880-4010-18	CFS7 @ 1'	Total/NA	Solid	8015NM Prep	
880-4010-19	CFS8 @ 1'	Total/NA	Solid	8015NM Prep	
880-4010-20	CFS9 @ 1'	Total/NA	Solid	8015NM Prep	
MB 880-5213/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5213/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5213/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-4010-1 MS	SW1	Total/NA	Solid	8015NM Prep	
880-4010-1 MSD	SW1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 5214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-21	CFS10 @ 1'	Total/NA	Solid	8015B NM	5199
880-4010-22	WW4	Total/NA	Solid	8015B NM	5199
MB 880-5199/1-A	Method Blank	Total/NA	Solid	8015B NM	5199
LCS 880-5199/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5199
LCSD 880-5199/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5199

Analysis Batch: 5216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-1	SW1	Total/NA	Solid	8015B NM	5213
880-4010-2	SW2	Total/NA	Solid	8015B NM	5213
880-4010-3	SW3	Total/NA	Solid	8015B NM	5213
880-4010-4	NW1	Total/NA	Solid	8015B NM	5213
880-4010-5	NW2	Total/NA	Solid	8015B NM	5213
880-4010-6	NW3	Total/NA	Solid	8015B NM	5213
880-4010-7	EW1	Total/NA	Solid	8015B NM	5213

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

GC Semi VOA (Continued)

Analysis Batch: 5216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-8	EW2	Total/NA	Solid	8015B NM	5213
880-4010-9	WW1	Total/NA	Solid	8015B NM	5213
880-4010-10	WW2	Total/NA	Solid	8015B NM	5213
880-4010-11	WW3	Total/NA	Solid	8015B NM	5213
880-4010-12	CFS1 @ 1'	Total/NA	Solid	8015B NM	5213
880-4010-13	CFS2 @ 1'	Total/NA	Solid	8015B NM	5213
880-4010-14	CFS3 @ 1'	Total/NA	Solid	8015B NM	5213
880-4010-15	CFS4 @ 1'	Total/NA	Solid	8015B NM	5213
880-4010-16	CFS5 @ 1'	Total/NA	Solid	8015B NM	5213
880-4010-17	CFS6 @ 1'	Total/NA	Solid	8015B NM	5213
880-4010-18	CFS7 @ 1'	Total/NA	Solid	8015B NM	5213
880-4010-19	CFS8 @ 1'	Total/NA	Solid	8015B NM	5213
880-4010-20	CFS9 @ 1'	Total/NA	Solid	8015B NM	5213
MB 880-5213/1-A	Method Blank	Total/NA	Solid	8015B NM	5213
LCS 880-5213/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5213
LCSD 880-5213/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5213
880-4010-1 MS	SW1	Total/NA	Solid	8015B NM	5213
880-4010-1 MSD	SW1	Total/NA	Solid	8015B NM	5213

HPLC/IC

Leach Batch: 5224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-1	SW1	Soluble	Solid	DI Leach	
880-4010-2	SW2	Soluble	Solid	DI Leach	
880-4010-3	SW3	Soluble	Solid	DI Leach	
880-4010-4	NW1	Soluble	Solid	DI Leach	
880-4010-5	NW2	Soluble	Solid	DI Leach	
880-4010-6	NW3	Soluble	Solid	DI Leach	
880-4010-7	EW1	Soluble	Solid	DI Leach	
880-4010-8	EW2	Soluble	Solid	DI Leach	
880-4010-9	WW1	Soluble	Solid	DI Leach	
880-4010-10	WW2	Soluble	Solid	DI Leach	
880-4010-11	WW3	Soluble	Solid	DI Leach	
880-4010-12	CFS1 @ 1'	Soluble	Solid	DI Leach	
880-4010-13	CFS2 @ 1'	Soluble	Solid	DI Leach	
880-4010-14	CFS3 @ 1'	Soluble	Solid	DI Leach	
880-4010-15	CFS4 @ 1'	Soluble	Solid	DI Leach	
880-4010-16	CFS5 @ 1'	Soluble	Solid	DI Leach	
880-4010-17	CFS6 @ 1'	Soluble	Solid	DI Leach	
880-4010-18	CFS7 @ 1'	Soluble	Solid	DI Leach	
MB 880-5224/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5224/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5224/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-4010-1 MS	SW1	Soluble	Solid	DI Leach	
880-4010-1 MSD	SW1	Soluble	Solid	DI Leach	
880-4010-11 MS	WW3	Soluble	Solid	DI Leach	
880-4010-11 MSD	WW3	Soluble	Solid	DI Leach	

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

HPLC/IC

Leach Batch: 5225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-19	CFS8 @ 1'	Soluble	Solid	DI Leach	
880-4010-20	CFS9 @ 1'	Soluble	Solid	DI Leach	
880-4010-21	CFS10 @ 1'	Soluble	Solid	DI Leach	
880-4010-22	WW4	Soluble	Solid	DI Leach	
MB 880-5225/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5225/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5225/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-4010-19 MS	CFS8 @ 1'	Soluble	Solid	DI Leach	
880-4010-19 MSD	CFS8 @ 1'	Soluble	Solid	DI Leach	

Analysis Batch: 5250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-1	SW1	Soluble	Solid	300.0	5224
880-4010-2	SW2	Soluble	Solid	300.0	5224
880-4010-3	SW3	Soluble	Solid	300.0	5224
880-4010-4	NW1	Soluble	Solid	300.0	5224
880-4010-5	NW2	Soluble	Solid	300.0	5224
880-4010-6	NW3	Soluble	Solid	300.0	5224
880-4010-7	EW1	Soluble	Solid	300.0	5224
880-4010-8	EW2	Soluble	Solid	300.0	5224
880-4010-9	WW1	Soluble	Solid	300.0	5224
880-4010-10	WW2	Soluble	Solid	300.0	5224
880-4010-11	WW3	Soluble	Solid	300.0	5224
880-4010-12	CFS1 @ 1'	Soluble	Solid	300.0	5224
880-4010-13	CFS2 @ 1'	Soluble	Solid	300.0	5224
880-4010-14	CFS3 @ 1'	Soluble	Solid	300.0	5224
880-4010-15	CFS4 @ 1'	Soluble	Solid	300.0	5224
880-4010-16	CFS5 @ 1'	Soluble	Solid	300.0	5224
880-4010-17	CFS6 @ 1'	Soluble	Solid	300.0	5224
880-4010-18	CFS7 @ 1'	Soluble	Solid	300.0	5224
MB 880-5224/1-A	Method Blank	Soluble	Solid	300.0	5224
LCS 880-5224/2-A	Lab Control Sample	Soluble	Solid	300.0	5224
LCSD 880-5224/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5224
880-4010-1 MS	SW1	Soluble	Solid	300.0	5224
880-4010-1 MSD	SW1	Soluble	Solid	300.0	5224
880-4010-11 MS	WW3	Soluble	Solid	300.0	5224
880-4010-11 MSD	WW3	Soluble	Solid	300.0	5224

Analysis Batch: 5255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4010-19	CFS8 @ 1'	Soluble	Solid	300.0	5225
880-4010-20	CFS9 @ 1'	Soluble	Solid	300.0	5225
880-4010-21	CFS10 @ 1'	Soluble	Solid	300.0	5225
880-4010-22	WW4	Soluble	Solid	300.0	5225
MB 880-5225/1-A	Method Blank	Soluble	Solid	300.0	5225
LCS 880-5225/2-A	Lab Control Sample	Soluble	Solid	300.0	5225
LCSD 880-5225/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5225
880-4010-19 MS	CFS8 @ 1'	Soluble	Solid	300.0	5225
880-4010-19 MSD	CFS8 @ 1'	Soluble	Solid	300.0	5225

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: SW1
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	5209	07/15/21 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5231	07/15/21 17:18	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 13:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 20:48	CH	XEN MID

Client Sample ID: SW2
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	5209	07/15/21 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5231	07/15/21 17:38	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 14:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 21:22	CH	XEN MID

Client Sample ID: SW3
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	5209	07/15/21 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5231	07/15/21 17:59	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 15:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 21:27	CH	XEN MID

Client Sample ID: NW1
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5209	07/15/21 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5231	07/15/21 18:20	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 15:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5			5250	07/15/21 21:33	CH	XEN MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: NW2
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5209	07/15/21 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5231	07/15/21 18:41	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 15:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5			5250	07/15/21 21:38	CH	XEN MID

Client Sample ID: NW3
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5209	07/15/21 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5231	07/15/21 19:01	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 16:07	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 21:55	CH	XEN MID

Client Sample ID: EW1
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	5209	07/15/21 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5231	07/15/21 19:22	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 16:28	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 22:00	CH	XEN MID

Client Sample ID: EW2
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	5209	07/15/21 09:22	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5231	07/15/21 19:43	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 16:49	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5			5250	07/15/21 22:06	CH	XEN MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: WW1
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 13:39	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 17:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 22:11	CH	XEN MID

Client Sample ID: WW2
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 13:59	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 17:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 22:17	CH	XEN MID

Client Sample ID: WW3
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 14:20	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 18:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 22:22	CH	XEN MID

Client Sample ID: CFS1 @ 1'
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 14:40	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 18:32	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5			5250	07/15/21 22:39	CH	XEN MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: CFS2 @ 1'
Lab Sample ID: 880-4010-13
Date Collected: 07/08/21 00:00
Matrix: Solid
Date Received: 07/15/21 08:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 15:01	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 18:53	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 22:44	CH	XEN MID

Client Sample ID: CFS3 @ 1'
Lab Sample ID: 880-4010-14
Date Collected: 07/08/21 00:00
Matrix: Solid
Date Received: 07/15/21 08:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 15:21	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 19:14	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 23:01	CH	XEN MID

Client Sample ID: CFS4 @ 1'
Lab Sample ID: 880-4010-15
Date Collected: 07/08/21 00:00
Matrix: Solid
Date Received: 07/15/21 08:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 15:41	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 19:35	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5			5250	07/15/21 23:06	CH	XEN MID

Client Sample ID: CFS5 @ 1'
Lab Sample ID: 880-4010-16
Date Collected: 07/08/21 00:00
Matrix: Solid
Date Received: 07/15/21 08:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 16:02	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 19:56	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5			5250	07/15/21 23:12	CH	XEN MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: CFS6 @ 1'
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 16:22	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 20:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5250	07/15/21 23:17	CH	XEN MID

Client Sample ID: CFS7 @ 1'
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	5264	07/16/21 08:35	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5266	07/16/21 16:43	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 20:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5224	07/15/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5			5250	07/15/21 23:23	CH	XEN MID

Client Sample ID: CFS8 @ 1'
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	5271	07/16/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5270	07/16/21 12:58	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 20:58	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	5225	07/15/21 12:36	CH	XEN MID
Soluble	Analysis	300.0		5			5255	07/16/21 00:17	CH	XEN MID

Client Sample ID: CFS9 @ 1'
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Lab Sample ID: 880-4010-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5271	07/16/21 09:44	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5270	07/16/21 13:19	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5213	07/15/21 10:01	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5216	07/15/21 21:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5225	07/15/21 12:36	CH	XEN MID
Soluble	Analysis	300.0		5			5255	07/16/21 00:34	CH	XEN MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Client Sample ID: CFS10 @ 1'

Lab Sample ID: 880-4010-21
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	5210	07/15/21 09:28	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5230	07/16/21 00:16	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	5199	07/15/21 11:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5214	07/15/21 16:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5225	07/15/21 12:36	CH	XEN MID
Soluble	Analysis	300.0		5			5255	07/16/21 00:39	CH	XEN MID

Client Sample ID: WW4

Lab Sample ID: 880-4010-22
Matrix: Solid
Date Collected: 07/08/21 00:00
Date Received: 07/15/21 08:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	5210	07/15/21 09:28	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5230	07/16/21 00:36	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5199	07/15/21 11:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5214	07/15/21 16:28	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	5225	07/15/21 12:36	CH	XEN MID
Soluble	Analysis	300.0		5			5255	07/16/21 00:45	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-4010-1
Project/Site: Lusk Deep Unit A #029
SDG: 14391

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Lusk Deep Unit A #029

Job ID: 880-4010-1
SDG: 14391

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-4010-1	SW1	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-2	SW2	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-3	SW3	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-4	NW1	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-5	NW2	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-6	NW3	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-7	EW1	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-8	EW2	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-9	WW1	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-10	WW2	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-11	WW3	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-12	CFS1 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-13	CFS2 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-14	CFS3 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-15	CFS4 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-16	CFS5 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-17	CFS6 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-18	CFS7 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-19	CFS8 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-20	CFS9 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-21	CFS10 @ 1'	Solid	07/08/21 00:00	07/15/21 08:34	
880-4010-22	WW4	Solid	07/08/21 00:00	07/15/21 08:34	

Chain of Custoc

XENCO LABORATORIES

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 S
Midland TX (432) 704-5440 EL Paso TX (915) 585-3443
Hobbs, NM (575) 392-7550 Carlsbad NM (575) 988-3199
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 L
Atlanta GA (770) 449-8800

880-4010 Chain of Custody

No: 880-4010

www.xenco.com Page 1 of 3

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

Work Order Comments

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

Project Name:	Lusk Deep Unit A #029	Turn Around	
Project Number	14391	Routine ☐	
Project Location		Rush ☑ 24HR	
Sampler's Name:	Eric Mojica	Due Date	
PO #:			

SAMPLE RECEIPT	Temp Blank.	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C).	5.2 | 5.7	Thermometer ID	IR8	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor	0.5	
Sample Custody Seals.	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chloride E300	BTEX 8021	TPH Modified Ext	TPH TX1005
SW1	S	7.8.21			1	✓	✓	✓	
SW2	S	7.8.21			1	✓	✓	✓	
SW3	S	7.8.21			1	✓	✓	✓	
NW1	S	7.8.21			1	✓	✓	✓	
NW2	S	7.8.21			1	✓	✓	✓	
NW3	S	7.8.21			1	✓	✓	✓	
EW1	S	7.8.21			1	✓	✓	✓	
EW2	S	7.8.21			1	✓	✓	✓	
WW1	S	7.8.21			1	✓	✓	✓	
WW2	S	7.8.21			1	✓	✓	✓	

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

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 Eric Mojica		7.8.21 1424	2		7-14-21 1700
3			4		
5			6		

Revised Date101419 Rev 2019 1

Chain of Custody

Work Order No: 880-4010

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
www xenco com

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

Work Order Comments

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

Project Name.	Lusk Deep Unit #029	Turn Around	
Project Number:	14391	Routine	☐
Project Location		Rush	☑
Sampler's Name.	Eric Mojica	Due Date	
PO #:			

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

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 Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chloride E300	BTEX 8021	TPH Modified Ext	TPH TX1005	Sample Comments
WW 3	S	7-8-21			1	✓	✓	✓		
CFS 1 @ 1'	S	7-8-21		1'	1	✓	✓	✓		
CFS 2 @ 1'	S	7-8-21		1'	1	✓	✓	✓		
CFS 3 @ 1'	S	7-8-21		1'	1	✓	✓	✓		
CFS 4 @ 1'	S	7-8-21		1'	1	✓	✓	✓		
CFS 5 @ 1'	S	7-8-21		1'	1	✓	✓	✓		
CFS 6 @ 1'	S	7-8-21		1'	1	✓	✓	✓		
CFS 7 @ 1'	S	7-8-21		1'	1	✓	✓	✓		
CFS 8 @ 1'	S	7-8-21		1'	1	✓	✓	✓		
CFS 9 @ 1'	S	7-8-21		1'	1	✓	✓	✓		

ANALYSIS REQUEST

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	Eric Mojica	Stanton	7-8-21 1429	2	Stanton	7/14/21
3				4		1700
5				6		

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Chain of Custody

Work Order No: 880-4010

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 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

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

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfield ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level I ☐ Level ☐ PST/US ☐ TRP ☐ Level V ☐
Deliverables EDD ☐ ADaPT ☐ Other

Project Name	Lusk Deep Unit A #029	Turn Around	
Project Number	14391	Routine	☐
Project Location		Rush	☑
Sampler's Name	Eric Mojica	Due Date	
PO #:			

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

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 Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chloride E300	BTEX 8021	TPH Modified Ext	TPH TX1005	Sample Comments
CFS 101	S	7-8-21		1'	1	✓	✓	✓		
WW4	S	7-8-21			1	✓	✓	✓		

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 Eric Mojica		7-8-21 1424	2		7-14-21 1700
3			4		
5			6		

Revised Date101419 Rev 2019 1

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-4010-1
SDG Number: 14391

Login Number: 4010
List Number: 1
Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Appendix D
Photographic Log

Photographic Log

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

Photo Number: 2 **Photo Direction:** Northeast **Photo Description:** View of the excavated area.	

Photographic Log

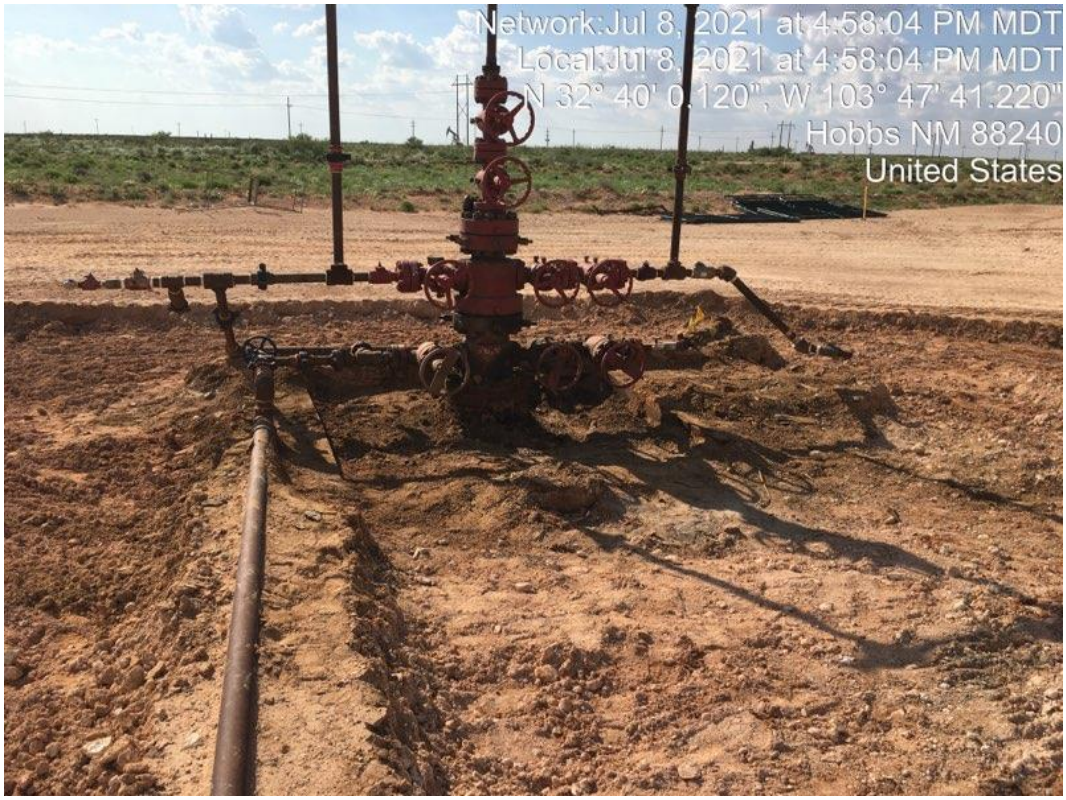
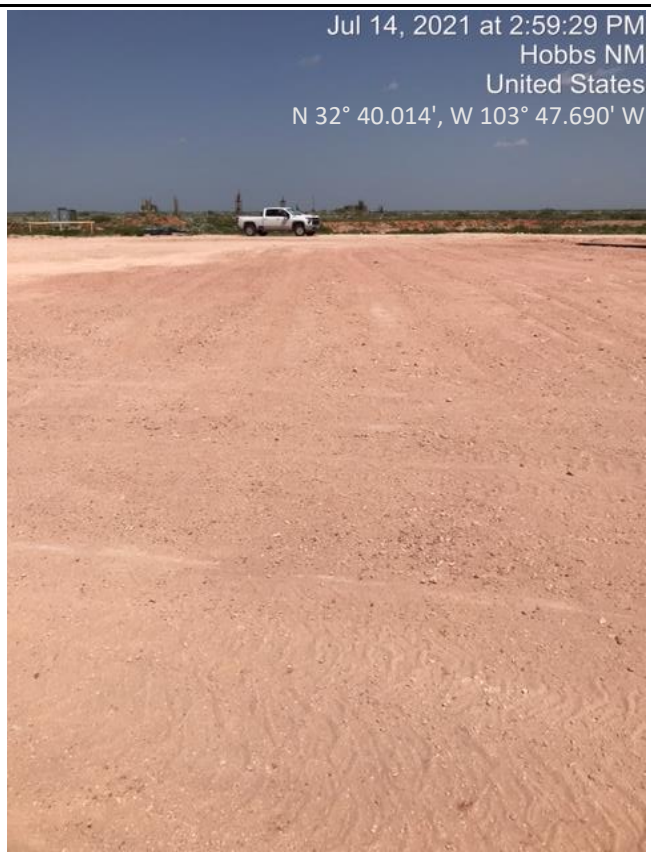
Photo Number: 3	
Photo Direction: Northeast	
Photo Description: View of the excavated area.	

Photo Number: 4	
Photo Direction: Southeast	
Photo Description: View of the remediated area after backfilling and regrading.	

Photographic Log

Photo Number: 5 **Photo Direction:** East-Southeast **Photo Description:** View of the remediated area after backfilling and regrading.	

Photo Number: 6 **Photo Direction:** East **Photo Description:** View of the remediated area after backfilling and regrading.	

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

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

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 39542
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	8/31/2021