

Incident ID	nRM2004550944
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: Chet Stuart Title: Manager-EHS/Operations Support
Signature: Chet Stuart Date: 4/7/21
email: cstuart@contango.com Telephone: (432)302-0538

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Remediation Summary & Deferral Request

Contango Oil & Gas, Inc.

Kersey State Battery

Eddy County, New Mexico

Unit Letter P, Section 32, Township 17 South, Range 28 East

Latitude 32.78601 North, Longitude 104.19064 West

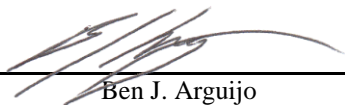
NMOCD Reference No. nRM2004550944

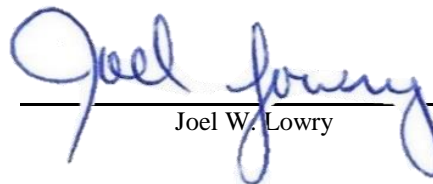
Prepared By:

Etech Environmental & Safety Solutions, Inc.

3100 Plains Highway

Lovington, New Mexico 88260


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1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Contango Oil & Gas, Inc., has prepared this *Remediation Summary & Deferral Request* for the release site known as the Kersey State Battery (henceforth, "Site"). Details of the release are summarized below:

Location of Release Source

Latitude: 32.78601 Longitude: -104.19064
Provided GPS are in WGS84 format.

Site Name:	Kersey State Battery	Site Type:	Tank Battery
Date Release Discovered:	2/8/2020	API # (if applicable):	30-015-30889

Unit Letter	Section	Township	Range	County
P	32	17S	28E	Eddy

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name COG Operating, LLC)

Nature and Volume of Release

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls)	1.9	Volume Recovered (bbls)	1
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls)	15.2	Volume Recovered (bbls)	7.5
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
<input type="checkbox"/> Condensate	Volume Released (bbls)		Volume Recovered (bbls)	
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)	
<input type="checkbox"/> Other (describe)	Volume/Weight Released		Volume/Weight Recovered	

Cause of Release:

The release was attributed to the transfer pump not having power, resulting in a tank being over filled. The release was confined to within the secondary containment.

Initial Response

<input checked="" type="checkbox"/> The source of the release has been stopped.
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.
<input checked="" type="checkbox"/> Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
<input checked="" type="checkbox"/> 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 December 21, 2020, a temporary monitor well was drilled on-site to fifty-five (55) feet below ground surface (bgs) in an effort to determine if shallow groundwater is present. Depth to groundwater information is provided in Appendix A. A monitor well drilling log is provided in Appendix B.

What is the shallowest depth to groundwater beneath the area affected by the release?	~110'	
Did the release impact groundwater or surface water?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production or storage site?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figures 1, 2, 4, and 5.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

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

Probable Depth to Groundwater	Constituent	Method	Closure Criteria	Reclamation Standard*
~110'	Chloride	EPA 300.0 or SM4500 Cl B	20,000 mg/kg	600 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	2,500 mg/kg	100 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	1,000 mg/kg	-
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg	50 mg/kg
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg	10 mg/kg

* The NMOCD Reclamation Standard applies only to the top 4' of soil in non-production areas.

4.0 INITIAL SITE ASSESSMENT

On February 25, 2020, Etech conducted an initial site assessment. During the initial site assessment, two (2) hand-augered soil bores (V1 and V2) were advanced within the release margins in an effort to determine the vertical extent of soil impacts. The soil bores were advanced to the point of refusal at approximately two (2) feet bgs. In addition, ten (10) hand-augered soil bores (NH1, NH1B, EH1, EH1B, EH2, EH2B, SH1, SH1B, WH1, and WH1B) were advanced along the inferred edges of the affected area in an effort to determine the horizontal extent of soil impacts. The soil bores were advanced to depths ranging from three (3) inches to one (1) foot bgs. During the advancement of the hand-augered soil bores, soil samples were collected and field-screened for the presence of Volatile Organic Compounds utilizing a Photoionization Detector (PID) and/or concentrations of chloride utilizing a Hach Quantab® chloride test kit.

Based on field observations and field test data, fourteen (14) delineation soil samples (V1 @ Surf., V1 @ 3' - R, V2 @ Surf., V2 @ 2' - R, NHB @ Surf., NHB @ 1', EH1B @ Surf., EH1B @ 1', EH2B @ Surf., EH2B @ 1', SHB @ Surf., SHB @ 1', WHB @ Surf., and WHB @ 1') were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples. However, additional delineation of soil affected above the NMOCD Reclamation Standard was required, and additional vertical delineation of BTEX and TPH was required in the area characterized by sample point V1. Soil was not affected above NMOCD Closure Criteria beyond two (2) feet bgs in the area characterized by sample point V2.

On March 20, 2020, Etech revisited the Site. During the site visit, a test trench was advanced in the area characterized by sample point V1 in an effort to further investigate the vertical extent of impacted soil. During the advancement of the test trench, two (2) soil samples (V1 @ 3' and V1 @ 4') were collected for submittal to the laboratory for analysis of BTEX and TPH. Laboratory analytical results indicated BTEX and TPH concentrations were below the NMOCD Closure Criteria and NMOCD Reclamation Standard, and the vertical 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 and subsequent delineation event, Contango Oil & Gas, Inc., proposed the following remediation activities designed to advance the Site toward an approved closure:

- Utilizing mechanical equipment, excavate impacted soil affected above the NMOCD Closure Criteria in the area characterized by sample points V1 and V2 to estimated depths of three (3) feet and two (2) feet bgs, respectively.
- Advance the floor and sidewalls of the excavated area until laboratory analytical results indicate BTEX, TPH, and chloride concentrations are below the NMOCD Closure Criteria or to the maximum extent practicable.
- Stockpile excavated soil on-site pending transport to an NMOCD-permitted surface waste facility for disposal.
- Upon receiving laboratory analytical results from excavation confirmation soil samples, backfill the excavated area with locally sourced, non-impacted "like" material.
- Defer remediation of impacted soil affected above the NMOCD Closure Criteria within the containment area until the facility is decommissioned and abandoned.
- Upon completion of remediation activities, prepare a *Remediation Summary & Deferral Request* detailing remediation activities and laboratory analytical results from confirmation soil samples.

6.0 REGULATORY APPROVALS AND STIPULATIONS

On May 13, 2020, a *Site Assessment Report and Proposed Remediation Workplan & Deferral Request* (henceforth, "Workplan") was submitted to the NMOCD proposing remediation activities designed to advance the Site toward regulatory closure. The Workplan was subsequently approved, with the conditions that the horizontal extent of chloride contamination be delineated to 600 mg/kg or less, all impacted soil affected above the NMOCD Closure Criteria be excavated prior to submittal of an additional deferral request (with the exception of areas where deferral is being requested), and that the exact sample points and justification for deferral of remediation be specified in the request.

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

7.0 REMEDIATION ACTIVITIES SUMMARY

On December 12, 2020, an investigative soil boring/temporary monitor well was drilled at the Site in an effort to further investigate site characteristics and determine if shallow groundwater was present in the area. The investigative soil bore was advanced to a total depth of approximately fifty-five (55) feet bgs and left open for seventy-two (72) hours. No indications of inflow and/or accumulation of water were noted during the advancement of the soil bore or prior to plugging and abandonment. The soil boring log is provided in Appendix B.

On January 21, 2021, Etech commenced remediation activities at the Site. In accordance with the approved Workplan, impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was excavated and stockpiled on-site, pending transfer to an NMOCD-approved surface waste facility for disposal. A chloride field test kit and/or olfactory/visual senses were utilized to guide the excavation. The floor and sidewalls of the excavation were advanced to the extent practicable or until field observations suggested BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

On January 25, 2021, Etech collected five (5) confirmation soil samples (NW, E1, E2, SW1, and WW1) from the sidewalls of the excavation. 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 and/or NMOCD Reclamation Standard in each of the submitted soil samples, with the exception of soil sample E2, which exhibited a TPH concentration that exceeded the NMOCD Closure Criteria.

On January 26, 2021, Etech collected four (4) confirmation soil samples (FL 1 @ 8", FL 2 @ 8", FL 3 @ 8", and FL 4 @ 2') from the floor of the excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX and chloride concentrations were below the applicable NMOCD Closure Criteria in each of the submitted soil samples. TPH concentrations exceeded the NMOCD Closure Criteria in each of the submitted soil samples, with the exception of soil sample FL4 @ 2'. Additional excavation in the areas characterized by soil samples FL 1 @ 8", FL 2 @ 8", and FL 3 @ 8" was precluded by the presence of the on-site storage tanks and associated pipes and appurtenances adjacent to the excavation.

In accordance with the NMOCD, Etech also collected three (3) soil samples (SP1-D, SP2-D, and WH1-D) inside the containment area to further investigate the horizontal extent of impacted soil and more adequately define the area requiring deferral of remediation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated the western extent of impacted soil was adequately defined.

On February 1, 2021, the excavation was advanced in the area characterized by soil sample E2. Etech collected a confirmation soil sample (E2B) from the sidewall of the excavation and submitted it to the laboratory for analysis of chloride. Laboratory analytical results indicated the chloride concentration was below the NMOCD Closure Criteria.

In accordance with the NMOCD, Etech also collected four (4) soil samples (ND, ED, SD, and WD) to further investigate the horizontal extent of impacted soil. The soil samples were submitted to the laboratory for analysis of chloride. Laboratory analytical results confirmed that the horizontal extent of chloride contamination had been delineated to less than 600 mg/kg.

The final dimensions of the excavation were approximately 118 feet in length, four (4) to twenty-five (25) feet in width, and eight (8) inches to two (2) feet in depth. During the course of remediation activities, approximately forty (40) cubic yards of impacted soil were transported to an NMOCD-approved surface waste facility for disposal.

A "Site & Sample Location Map" is provided as Figure 3. Soil chemistry data is summarized in Table 1. Field notes and soil profile logs are provided in Appendix B. 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 confined to the containment area of an active tank battery facility on a production pad. 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 re-vegetation will be conducted upon decommission and abandonment of the facility.

9.0 DEFERRAL REQUEST

Remediation activities were conducted in accordance with an approved Workplan. Impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was excavated to the extent practicable and transported to an NMOCD-approved disposal facility. Laboratory analytical results from excavation confirmation soil samples indicate concentrations of BTEX and chloride were below the applicable NMOCD Closure Criteria. Due to safety and environmental concerns, impacted soil remaining adjacent to and/or underneath the on-site storage tanks and/or associated pipes and appurtenances in the areas characterized by soil samples FL1 @ 8", FL2 @ 8", FL3 @ 8", SP1-D, and SP2-D will be remediated upon decommission and abandonment of the facility.

Based on laboratory analytical results and field activities conducted to date, Etech recommends Contango Oil & Gas, Inc., provide copies of this *Remediation Summary & Deferral Request* to the appropriate agencies and cease remediation activities at the Site.

10.0 LIMITATIONS

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

This report has been prepared for the benefit of Contango Oil & Gas, Inc. Use of the information contained in this report is prohibited without the consent of Etech and/or Contango Oil & Gas, Inc.

11.0 DISTRIBUTION

Contango Oil & Gas, Inc.

717 Texas Ave.

Suite 2900

Houston, TX 77002

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 2

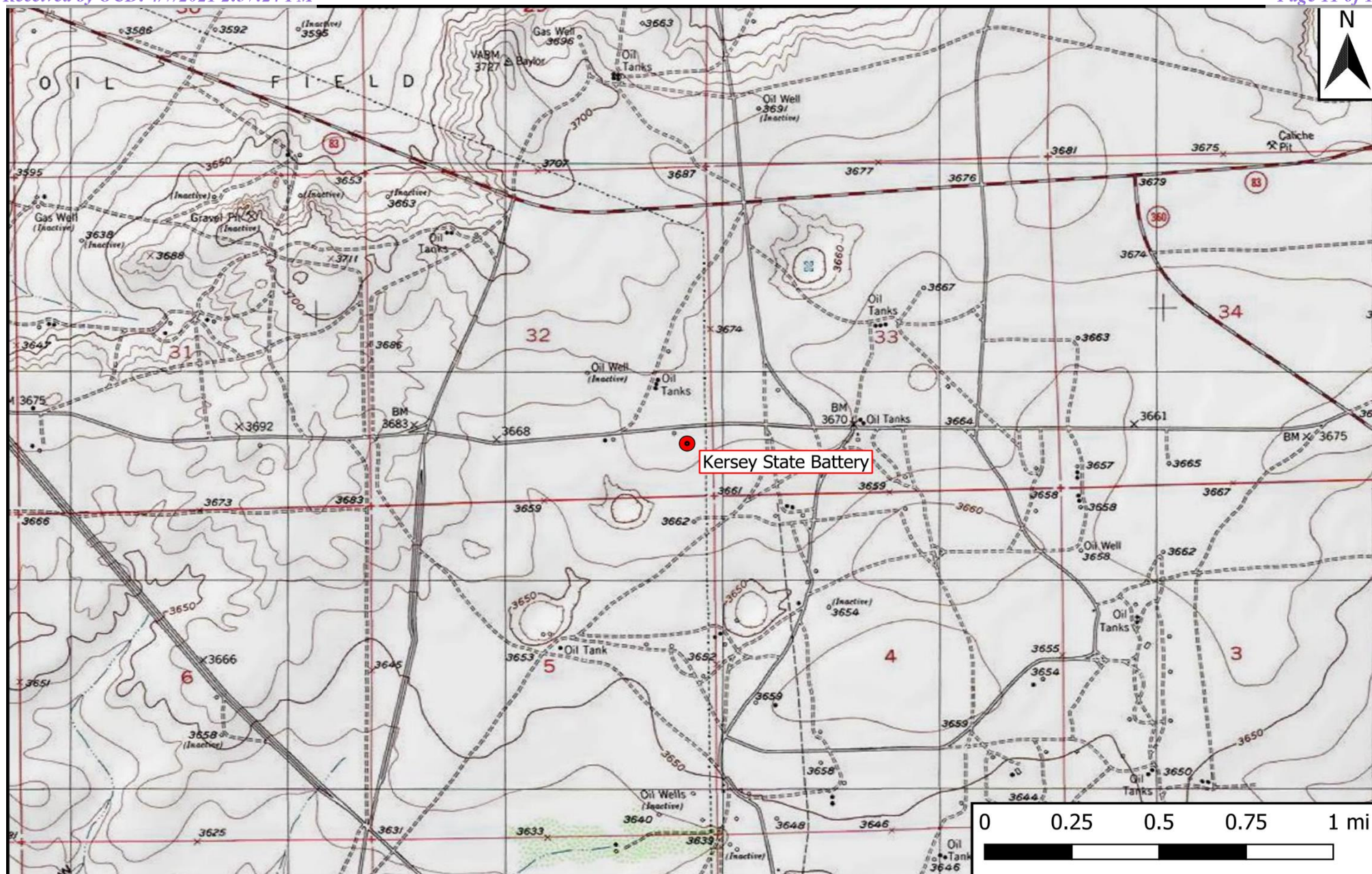
811 S. First Street

Artesia, NM 88210

(Electronic Submission)

Figure 1

Topographic Map



Legend

- Site Location

Figure 1

Topographic Map
 Contango Oil & Gas, Inc.
 Kersey State Battery
 GPS: 32.78601, -104.19064
 Eddy County

ETECH
 Environmental & Safety Solutions, Inc.

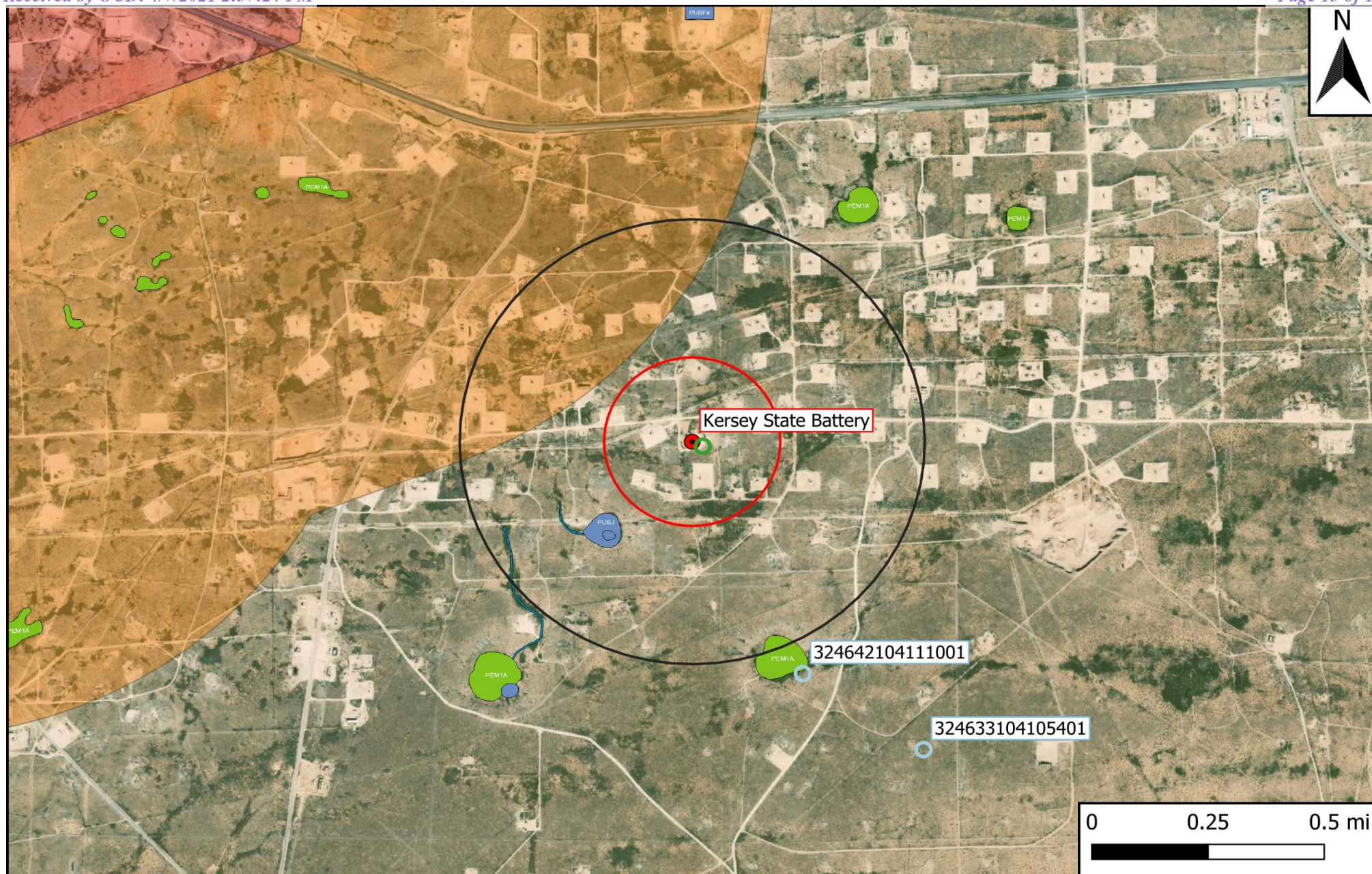
Drafted: bja

Checked: jwl

Date: 2/25/21

Figure 2

Aerial Proximity Map



Legend

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

Figure 2

Aerial Proximity Map
 Contango Oil & Gas, Inc.
 Kersey State Battery
 GPS: 32.78601, -104.19064
 Eddy County

eTECH

Environmental & Safety Solutions, Inc.



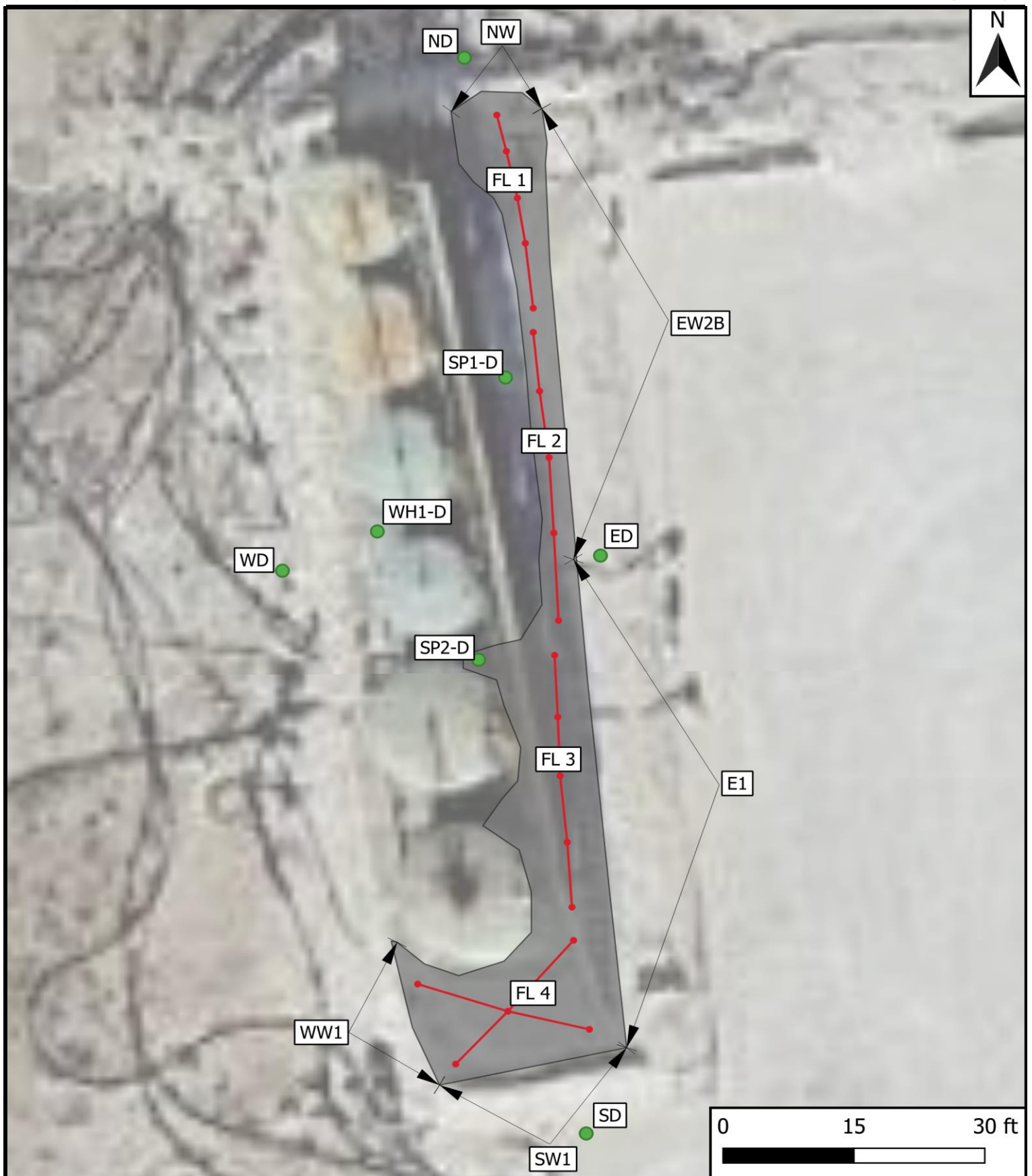
Drafted: bja

Checked: jwl

Date: 2/25/21

Figure 3

Site & Sample Location Map



Legend

- Excavation
- Sample Location
- Composite Floor Sample
- Composite Wall Sample

Figure 3

Site & Sample Location Map
 Contango Oil & Gas, Inc.
 Kersey State Battery
 GPS: 32.78601, -104.19064
 Eddy County



Drafted: bja

Checked: jwl

Date: 2/25/21

Table 1
Concentrations of BTEX, TPH & Chloride in Soil

Table 1 Concentrations of BTEX, TPH & Chloride in Soil Contango Oil & Gas, Inc. Kersey State Battery NMOCD Ref. #: nRM2004550944											
NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	20,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 C
				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)
Delineation/Deferral											
V1 @ Surf.	2/25/2020	Surf.	Excavated	25.2	604	5,330	17,700	23,000	2,900	25,900	1,340
V1 @ 3' - R	2/25/2020	3' - R	Slough	1.09	83.5	457	2,210	2,670	160	2,830	1,310
V1 @ 3'	3/20/2020	3'	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	-
V1 @ 4'	3/20/2020	4'	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	-
V2 @ Surf.	2/25/2020	Surf.	Excavated	13.6	471	2,080	9,990	12,100	1,190	13,300	16.0
V2 @ 2' - R	2/25/2020	2' - R	In-Situ	0.182	6.72	49.4	315	364	32.6	397	400
NHB @ Surf.	2/25/2020	Surf.	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	1,760
NHB @ 1'	2/25/2020	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	1,500
EH1B @ Surf.	2/25/2020	Surf.	In-Situ	<0.050	<0.300	<10.0	354	354	39.9	394	3,960
EH1B @ 1'	2/25/2020	1'	In-Situ	<0.050	<0.300	<10.0	794	794	116	910	3,840
EH2B @ Surf.	2/25/2020	Surf.	In-Situ	<0.050	<0.300	<10.0	20.4	20.4	<10.0	20.4	5,360
EH2B @ 1'	2/25/2020	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	5,040
SHB @ Surf.	2/25/2020	Surf.	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	7,680
SHB @ 1'	2/25/2020	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	6,880
WHB @ Surf.	2/25/2020	Surf.	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,200
WHB @ 1'	2/25/2020	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	1,280
SP1-D	1/26/2021	6"	Deferral	<0.00202	0.0798	<249	19,900	19,900	3,600	23,500	7,940
SP2-D	1/26/2021	8"	Deferral	0.00828	0.0480	<250	22,900	22,900	3,460	26,400	7,680
WH-D	1/26/2021	6"	Deferral	<0.00200	0.167	<49.9	<49.9	<49.9	<49.9	<49.9	4,310
ND	2/1/2021	6"	In-Situ	-	-	-	-	-	-	-	64.0
ED	2/1/2021	6"	In-Situ	-	-	-	-	-	-	-	320
SD	2/1/2021	6"	In-Situ	-	-	-	-	-	-	-	112
WD	2/1/2021	6"	In-Situ	-	-	-	-	-	-	-	80.0
Excavation											
NW	1/25/2021	0-8"	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	2,530
E1	1/25/2021	0-8"	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	5,870
E2	1/25/2021	0-8"	Excavated	<0.00202	<0.00202	<50.0	61.1	61.1	<50.0	61.1	29,100
EW2B	2/1/2021	0-8"	In-Situ	-	-	-	-	-	-	-	2,400
SW1	1/25/2021	0-2'	In-Situ	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	9,110
WW1	1/25/2021	0-2'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	2,020
FL 1 @ 8"	1/26/2021	8"	In-Situ	<0.00200	<0.00200	52.3	5,540	5,590	900	11,800	4,790
FL 2 @ 8"	1/26/2021	8"	In-Situ	<0.00201	0.254	251	20,900	21,200	2,860	24,000	7,590
FL 3 @ 8"	1/26/2021	8"	In-Situ	<0.00200	0.280	<250	12,000	12,000	1,800	13,800	16,000
FL 4 @ 2'	1/26/2021	2'	In-Situ	<0.00200	0.0514	<50.0	114	114	<50.0	114	2,530

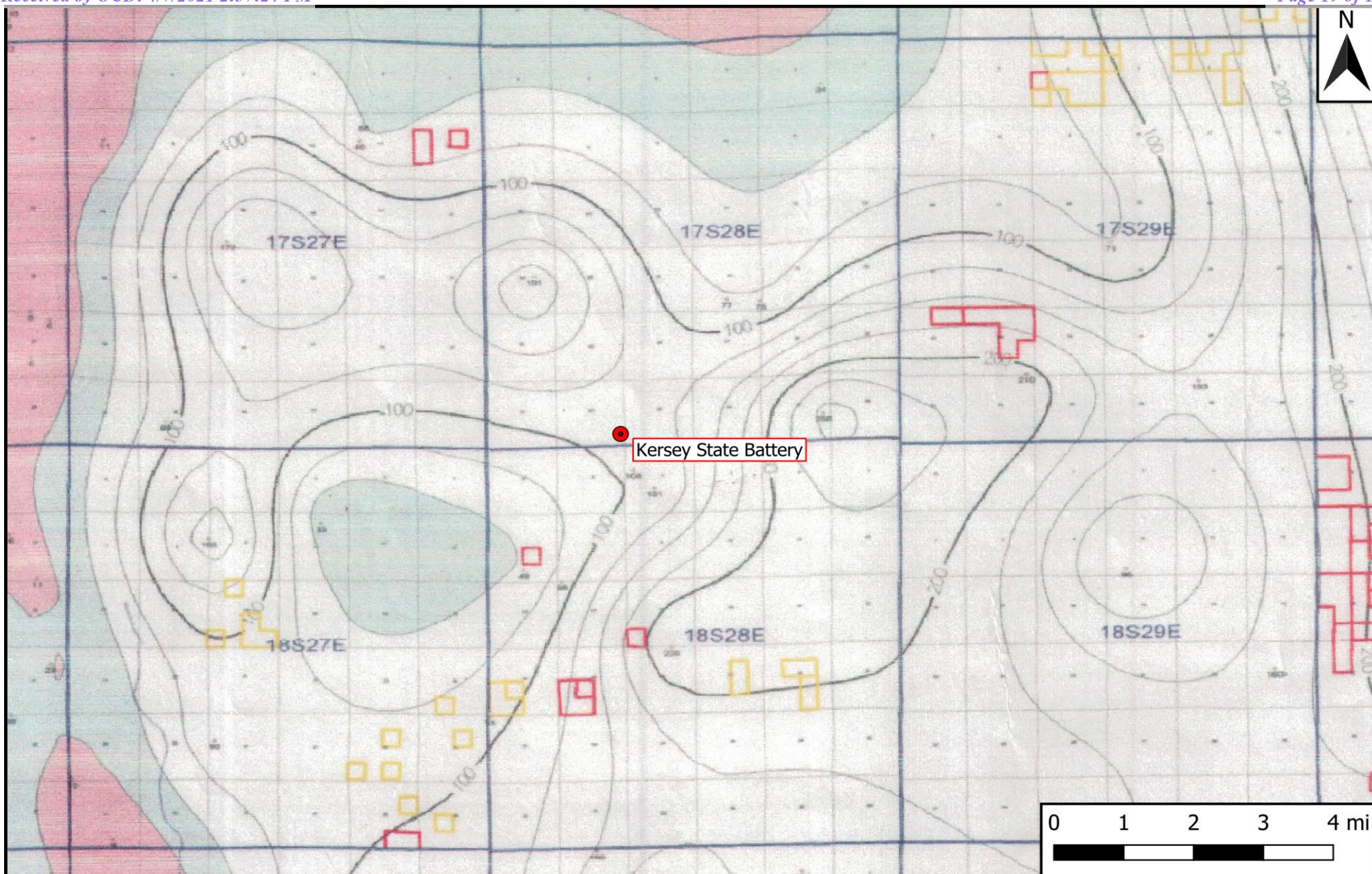
NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

Appendix A

Depth to Groundwater Information



Legend

- Site Location

Figure 4

Inferred Depth to Groundwater Trend Map
 Contango Oil & Gas, Inc.
 Kersey State Battery
 GPS: 32.78601, -104.19064
 Eddy County



Drafted: bja

Checked: jwl

Date: 2/25/21



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

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

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
RA 11857 POD1		RA	ED	1	1	2	05	18S	26E	577784	3625988	2731	235	95	140
Average Depth to Water:														95 feet	
Minimum Depth:														95 feet	
Maximum Depth:														95 feet	

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 575790

Northing (Y): 3627854.28

Radius: 3220

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

2/12/20 10:10 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA	11857 POD1	1	1	2	05	18S	26E	577784	3625988

x

Driller License: 1064 **Driller Company:** DELFORD W. MARTIN

Driller Name: MARTIN, DELFORD

Drill Start Date: 09/25/2012

Drill Finish Date: 10/01/2012

Plug Date:
Log File Date: 10/15/2012

PCW Rcv Date:
Source: Shallow

Pump Type:
Pipe Discharge Size:
Estimated Yield: 95 GPM

Casing Size: 5.00

Depth Well: 235 feet

Depth Water: 95 feet

x

Water Bearing Stratifications:

Top	Bottom	Description
95	130	Sandstone/Gravel/Conglomerate
160	235	Sandstone/Gravel/Conglomerate

x

Casing Perforations:

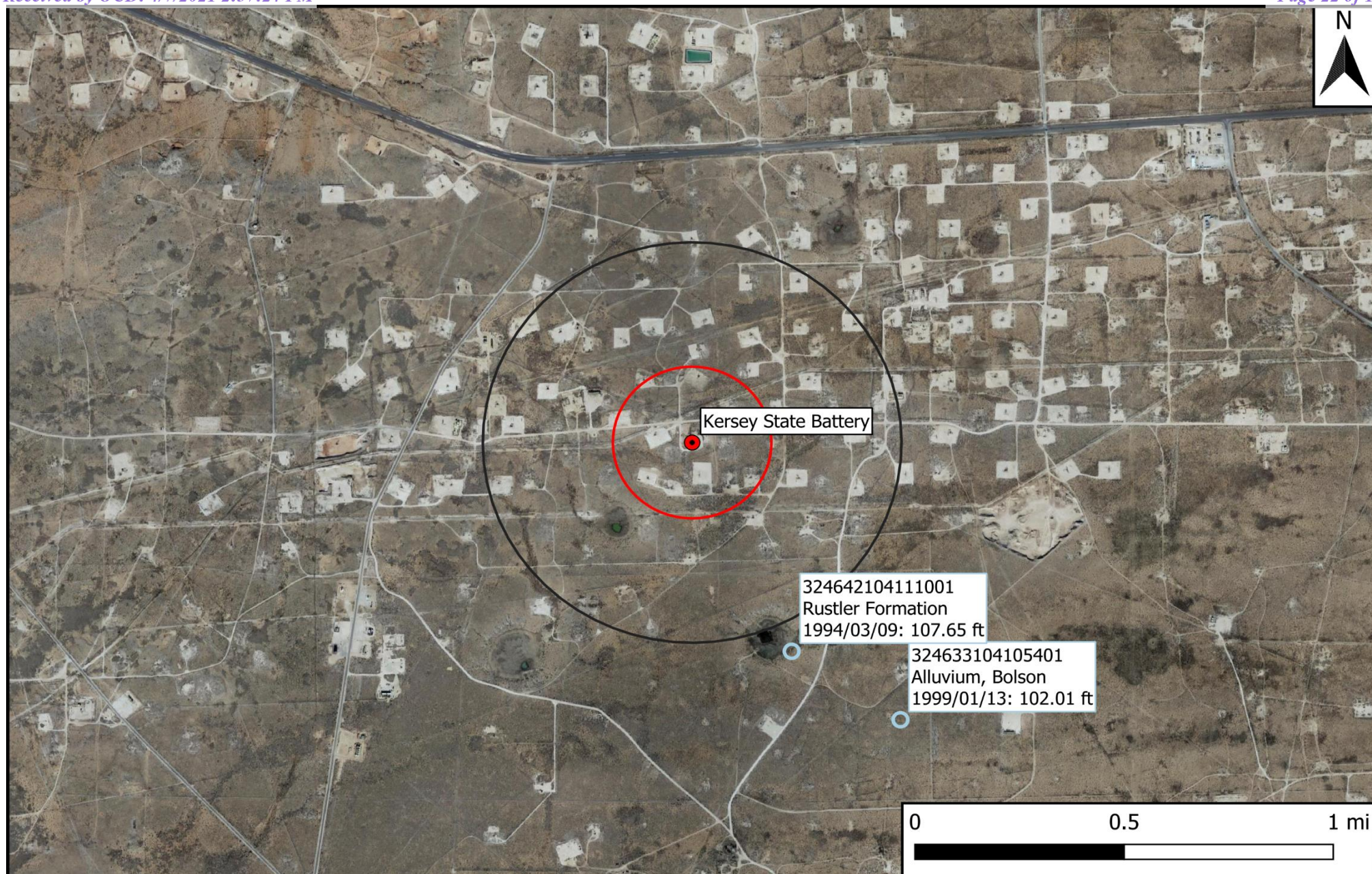
Top	Bottom
140	235

x

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

2/12/20 10:10 AM

POINT OF DIVERSION SUMMARY



Legend

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

Figure 5

USGS Well Proximity Map
Contango Oil & Gas, Inc.
Kersey State Battery
GPS: 32.78601, -104.19064
Eddy County

eTECH
Environmental & Safety Solutions, Inc.

Drafted: bja

Checked: jwl

Date: 2/25/21



National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

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Click to hide News Bulletins

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- [Full News](#)

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 324633104105401

Minimum number of levels = 1

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

USGS 324633104105401 18S.28E.04.32412

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

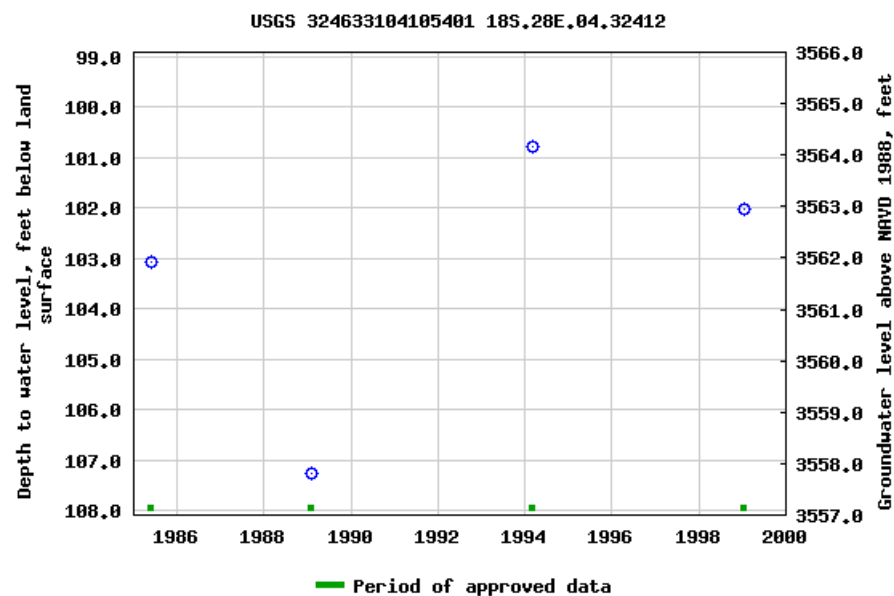
Latitude 32°46'33", Longitude 104°10'54" NAD27

Land-surface elevation 3,665 feet above NAVD88

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

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)



National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater


Geographic Area:

United States

GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 324642104111001

Minimum number of levels = 1

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

USGS 324642104111001 18S.28E.04.131444

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°46'42", Longitude 104°11'10" NAD27

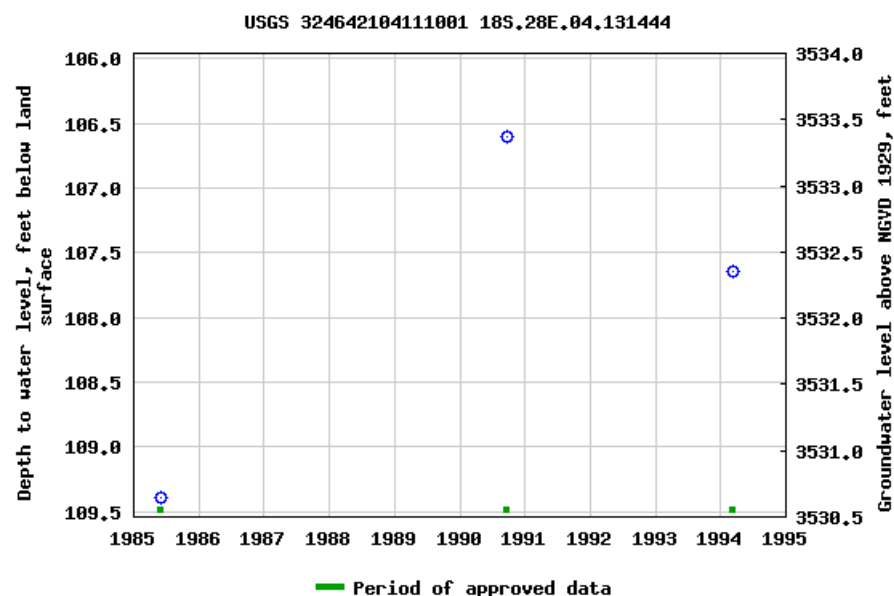
Land-surface elevation 3,640 feet above NGVD29

The depth of the well is 145.00 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

Appendix B

Field Data & Soil Profile Logs



Sample Log

Date: 2/25/20

Project: Kersey State Battery

Project Number: 11968

Latitude: 32.78601

Longitude: -104.19064

[illegible]

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

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

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

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

Soil Profile

Date: 2/25/20

Project: Kersey State Battery

Project Number: 11968 Latitude: 32.78601 Longitude: -104.19064

Depth (ft. bgs)	Description
1	Caliche / gravel
2	Caliche / rocky clay
3	Rocky clay
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	



Sample Log

Date: 1/21/21

Project: Kersey State Battery
Aspen 32 State Com #001

Project Number: 12652 pending Latitude: 32.78792 Longitude: -104.19439

[illegible]

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##


Refusal = SP #1 @ 4'-R

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

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

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

Logger:	Lance Crenshaw				
Driller:	Ready Drill, LLC				
Consultant:	Etech Environmental				
Drilling Method:	Rotary				
Start Date:	December 21, 2020				
End Date:	December 21, 2020				
Comments: Drilled 55' bore hole to determine no groundwater in area				Project Name: Kersey State Battery Well ID: NA	
Drafted by: Lance Crenshaw				Location: Lat: 32.78601 Long: -104.19064 County: Eddy State: NM	

Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
	-	-	-			
5	-	-	-	Caliche, Sand Mix		
	-	-	-			
10	-	-	-	Rock, Caliche		
	-	-	-			
15	-	-	-	Clay		
	-	-	-			
20	-	-	-	Red Clay, Sand		
	-	-	-			
25	-	-	-	Red Clay, Sand		
	-	-	-			
30	-	-	-	Red Clay, Sand		
	-	-	-			
35	-	-	-	Red Clay		
	-	-	-			
40	-	-	-	Red Clay		
	-	-	-			
45	-	-	-	Red Clay		
	-	-	-			
50	-	-	-	Red Clay		
	-	-	-			
55	-	-	-	Red Clay		

Appendix C

Laboratory Analytical Reports



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

March 02, 2020

JOEL LOWRY

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: KERSEY STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/26/20 8:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

Etech Environmental & Safety Solutions
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: V1 @ SURFACE (H000612-01)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	25.2	2.00	02/28/2020	ND	1.88	94.1	2.00	6.03	
Toluene*	191	2.00	02/28/2020	ND	1.90	95.0	2.00	6.11	
Ethylbenzene*	176	2.00	02/28/2020	ND	1.92	95.9	2.00	5.92	
Total Xylenes*	212	6.00	02/28/2020	ND	5.62	93.7	6.00	5.93	
Total BTX	604	12.0	02/28/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	02/28/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	5330	50.0	02/29/2020	ND	224	112	200	3.29		
DRO >C10-C28*	17700	50.0	02/29/2020	ND	240	120	200	4.40		
EXT DRO >C28-C36	2900	50.0	02/29/2020	ND						

Surrogate: 1-Chlorooctane 394 % 44.3-144

Surrogate: 1-Chlorooctadecane 522 % 42.2-156

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Etech Environmental & Safety Solutions
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: V1 @ 3' - R (H000612-02)

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	1.09	0.500	03/02/2020	ND	1.88	94.1	2.00	6.03	
Toluene*	17.0	0.500	03/02/2020	ND	1.90	95.0	2.00	6.11	
Ethylbenzene*	26.5	0.500	03/02/2020	ND	1.92	95.9	2.00	5.92	
Total Xylenes*	38.9	1.50	03/02/2020	ND	5.62	93.7	6.00	5.93	
Total BTEX	83.5	3.00	03/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1310	16.0	02/28/2020	ND	400	100	400	3.92		

TPH 8015M	mg/kg		Analyzed By: CK					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	457	50.0	02/28/2020	ND	213	107	200	3.13	QM-07
DRO >C10-C28*	2210	50.0	02/28/2020	ND	209	105	200	10.4	QM-07
EXT DRO >C28-C36	160	50.0	02/28/2020	ND					

Surrogate: 1-Chlorooctane 121 % 44.3-144

Surrogate: 1-Chlorooctadecane 162 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Etech Environmental & Safety Solutions
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: V2 @ SURFACE (H000612-03)

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	13.6	5.00	02/28/2020	ND	1.88	94.1	2.00	6.03	
Toluene*	134	5.00	02/28/2020	ND	1.90	95.0	2.00	6.11	
Ethylbenzene*	144	5.00	02/28/2020	ND	1.92	95.9	2.00	5.92	
Total Xylenes*	179	15.0	02/28/2020	ND	5.62	93.7	6.00	5.93	
Total BTEX	471	30.0	02/28/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	02/28/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	2080	50.0	02/28/2020	ND	213	107	200	3.13	
DRO >C10-C28*	9990	50.0	02/28/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	1190	50.0	02/28/2020	ND					

Surrogate: 1-Chlorooctane 215 % 44.3-144

Surrogate: 1-Chlorooctadecane 362 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Etech Environmental & Safety Solutions
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: V2 @ 2' - R (H000612-04)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.182	0.050	03/02/2020	ND	1.88	94.1	2.00	6.03	
Toluene*	1.63	0.050	03/02/2020	ND	1.90	95.0	2.00	6.11	
Ethylbenzene*	1.98	0.050	03/02/2020	ND	1.92	95.9	2.00	5.92	
Total Xylenes*	2.93	0.150	03/02/2020	ND	5.62	93.7	6.00	5.93	
Total BTX	6.72	0.300	03/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	02/28/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	49.4	10.0	02/28/2020	ND	213	107	200	3.13	
DRO >C10-C28*	315	10.0	02/28/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	32.6	10.0	02/28/2020	ND					

Surrogate: 1-Chlorooctane 88.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.0 % 42.2-156

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Analytical Results For:

Etech Environmental & Safety Solutions
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: NHB @ SURFACE (H000612-05)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/28/2020	ND	1.88	94.1	2.00	6.03		
Toluene*	<0.050	0.050	02/28/2020	ND	1.90	95.0	2.00	6.11		
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.92	95.9	2.00	5.92		
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.62	93.7	6.00	5.93		
Total BTX	<0.300	0.300	02/28/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1760	16.0	02/28/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/28/2020	ND	213	107	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/28/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	<10.0	10.0	02/28/2020	ND					

Surrogate: 1-Chlorooctane 78.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 77.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Etech Environmental & Safety Solutions
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: NHB @ 1' (H000612-06)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/28/2020	ND	1.93	96.3	2.00	2.88		
Toluene*	<0.050	0.050	02/28/2020	ND	1.96	97.8	2.00	2.93		
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.95	97.6	2.00	3.24		
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.65	94.2	6.00	3.34		
Total BTX	<0.300	0.300	02/28/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1500	16.0	02/28/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/28/2020	ND	213	107	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/28/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	<10.0	10.0	02/28/2020	ND					

Surrogate: 1-Chlorooctane 88.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.2 % 42.2-156

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: EH1B @ SURFACE (H000612-07)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/28/2020	ND	1.93	96.3	2.00	2.88		
Toluene*	<0.050	0.050	02/28/2020	ND	1.96	97.8	2.00	2.93		
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.95	97.6	2.00	3.24		
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.65	94.2	6.00	3.34		
Total BTX	<0.300	0.300	02/28/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3960	16.0	02/28/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/29/2020	ND	213	107	200	3.13	
DRO >C10-C28*	354	10.0	02/29/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	39.9	10.0	02/29/2020	ND					

Surrogate: 1-Chlorooctane 79.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 97.0 % 42.2-156

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Analytical Results For:

Etech Environmental & Safety Solutions
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 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: EH1B @ 1' (H000612-08)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/28/2020	ND	1.93	96.3	2.00	2.88		
Toluene*	<0.050	0.050	02/28/2020	ND	1.96	97.8	2.00	2.93		
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.95	97.6	2.00	3.24		
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.65	94.2	6.00	3.34		
Total BTX	<0.300	0.300	02/28/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3840	16.0	02/28/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/29/2020	ND	213	107	200	3.13	
DRO >C10-C28*	794	10.0	02/29/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	116	10.0	02/29/2020	ND					

Surrogate: 1-Chlorooctane 80.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 116 % 42.2-156

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Analytical Results For:

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Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: EH2B @ SURFACE (H000612-09)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/28/2020	ND	1.93	96.3	2.00	2.88	
Toluene*	<0.050	0.050	02/28/2020	ND	1.96	97.8	2.00	2.93	
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.95	97.6	2.00	3.24	
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.65	94.2	6.00	3.34	
Total BTX	<0.300	0.300	02/28/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5360	16.0	02/28/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/29/2020	ND	213	107	200	3.13	
DRO >C10-C28*	20.4	10.0	02/29/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	<10.0	10.0	02/29/2020	ND					

Surrogate: 1-Chlorooctane 84.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.5 % 42.2-156

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: EH2B @ 1' (H000612-10)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/28/2020	ND	1.93	96.3	2.00	2.88		
Toluene*	<0.050	0.050	02/28/2020	ND	1.96	97.8	2.00	2.93		
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.95	97.6	2.00	3.24		
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.65	94.2	6.00	3.34		
Total BTX	<0.300	0.300	02/28/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5040	16.0	02/28/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/29/2020	ND	213	107	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/29/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	<10.0	10.0	02/29/2020	ND					

Surrogate: 1-Chlorooctane 86.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.1 % 42.2-156

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: SHB @ SURFACE (H000612-11)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/28/2020	ND	1.93	96.3	2.00	2.88		
Toluene*	<0.050	0.050	02/28/2020	ND	1.96	97.8	2.00	2.93		
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.95	97.6	2.00	3.24		
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.65	94.2	6.00	3.34		
Total BTX	<0.300	0.300	02/28/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7680	16.0	02/28/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/29/2020	ND	213	107	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/29/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	<10.0	10.0	02/29/2020	ND					

Surrogate: 1-Chlorooctane 87.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.8 % 42.2-156

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Analytical Results For:

Etech Environmental & Safety Solutions
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 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: SHB @ 1' (H000612-12)

BTEx 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/28/2020	ND	1.93	96.3	2.00	2.88		
Toluene*	<0.050	0.050	02/28/2020	ND	1.96	97.8	2.00	2.93		
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.95	97.6	2.00	3.24		
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.65	94.2	6.00	3.34		
Total BTEx	<0.300	0.300	02/28/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6880	16.0	02/28/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/29/2020	ND	213	107	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/29/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	<10.0	10.0	02/29/2020	ND					

Surrogate: 1-Chlorooctane 83.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.3 % 42.2-156

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: WHB @ SURFACE (H000612-13)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/28/2020	ND	1.93	96.3	2.00	2.88		
Toluene*	<0.050	0.050	02/28/2020	ND	1.96	97.8	2.00	2.93		
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.95	97.6	2.00	3.24		
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.65	94.2	6.00	3.34		
Total BTX	<0.300	0.300	02/28/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3200	16.0	02/28/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/29/2020	ND	213	107	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/29/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	<10.0	10.0	02/29/2020	ND					

Surrogate: 1-Chlorooctane 90.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.7 % 42.2-156

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Analytical Results For:

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Received:	02/26/2020	Sampling Date:	02/25/2020
Reported:	03/02/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: WHB @ 1' (H000612-14)

BTEx 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/28/2020	ND	1.93	96.3	2.00	2.88		
Toluene*	<0.050	0.050	02/28/2020	ND	1.96	97.8	2.00	2.93		
Ethylbenzene*	<0.050	0.050	02/28/2020	ND	1.95	97.6	2.00	3.24		
Total Xylenes*	<0.150	0.150	02/28/2020	ND	5.65	94.2	6.00	3.34		
Total BTEx	<0.300	0.300	02/28/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1280	16.0	02/28/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/29/2020	ND	213	107	200	3.13	
DRO >C10-C28*	<10.0	10.0	02/29/2020	ND	209	105	200	10.4	
EXT DRO >C28-C36	<10.0	10.0	02/29/2020	ND					

Surrogate: 1-Chlorooctane 84.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.4 % 42.2-156

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 17 of 18

Company Name: Etech Environmental & Safety Solutions, Inc. Project Manager: Joel Lowry Address: P.O. Box 301 City: Lovington State: NM Zip: 88260 Phone #: (575) 396-2378 Fax #: (575) 396-1429 Project #: 11968 Project Owner: Grizzly Energy Project Name: Kersey State Battery Project Location: Rural Eddy Sampler Name: Matthew Grieco & Miguel Ramirez				BILL TO P.O. #: Company: Vanguard/Grizzly Attn: Carmen Pitt Address: City: State: Zip: Phone #: Fax #:				ANALYSIS REQUEST															
FOR LAB USE ONLY						MATRIX		PRESERV.		SAMPLING		Chloride TPH (8015M) BTEX (8021B)											
Lab I.D.		Sample I.D.		(G/RAB OR (C)OMP. # CONTAINERS		GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		ACID/BASE: ICE / COOL OTHER:		DATE TIME													
H000612																							
1		V1 @ Surf.		G 1		X		X		2/25/20 9:50		X X X											
2		V1 @ 3' - R		G 1		X		X		2/25/20 11:10		X X X											
3		V2 @ Surf.		G 1		X		X		2/25/20 10:40		X X X											
4		V2 @ 2' - R		G 1		X		X		2/25/20 11:40		X X X											
5		NHb @ Surf.		G 1		X		X		2/25/20 12:10		X X X											
6		NHb @ 1'		G 1		X		X		2/25/20 12:15		X X X											
7		EH1b @ Surf.		G 1		X		X		2/25/20 11:15		X X X											
8		EH1b @ 1'		G 1		X		X		2/25/20 11:25		X X X											
9		EH2b @ Surf.		G 1		X		X		2/25/20 11:20		X X X											
10		EH2b @ 1'		G 1		X		X		2/25/20 11:30		X X X											
<small>PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.</small>																							
Relinquished By: <i>[Signature]</i> Date: 2-26-20 Time: 0850				Received By: <i>[Signature]</i> Date: Time:				Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #: REMARKS: Please email results to pm@etechenv.com.															
Relinquished By: Date: Time:				Received By:																			
Delivered By: (Circle One) Sampler - UPS - Bus - Other: -6.8c #113				Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				CHECKED BY: (Initials) <i>[Signature]</i>															

FORM-006
Revision 1.0

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



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

March 26, 2020

JOEL LOWRY

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: KERSEY STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 03/23/20 15:36.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

Etech Environmental & Safety Solutions
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	03/23/2020	Sampling Date:	03/20/2020
Reported:	03/26/2020	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	Cool & Intact
Project Number:	11968	Sample Received By:	Kelly Jacobson
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: V1 @ 3' (H000886-01)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/24/2020	ND	211	106	200	1.08	
DRO >C10-C28*	<10.0	10.0	03/24/2020	ND	229	114	200	4.48	
EXT DRO >C28-C36	<10.0	10.0	03/24/2020	ND					
Surrogate: 1-Chlorooctane	84.6 %	44.3-144							
Surrogate: 1-Chlorooctadecane	91.8 %	42.2-156							

Sample ID: V1 @ 4' (H000886-02)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/24/2020	ND	211	106	200	1.08	
DRO >C10-C28*	<10.0	10.0	03/24/2020	ND	229	114	200	4.48	
EXT DRO >C28-C36	<10.0	10.0	03/24/2020	ND					
Surrogate: 1-Chlorooctane	81.2 %	44.3-144							
Surrogate: 1-Chlorooctadecane	88.0 %	42.2-156							

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



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Notes and Definitions

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

Cardinal Laboratories

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A handwritten signature in black ink, appearing to read "Mike Snyder", is written over a horizontal line.

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



Certificate of Analysis Summary 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Kersey State Battery Historical

Project Id: 11986
Contact: PM
Project Location: Rural Eddy County, NM

Date Received in Lab: Wed 01.27.2021 11:50
Report Date: 01.29.2021 16:43
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	686161-001	686161-002	686161-003	686161-004	686161-005	
	<i>Field Id:</i>	NW	SW1	E1	E2	WW1	
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	01.25.2021 10:00	01.25.2021 09:00	01.25.2021 11:00	01.25.2021 11:00	01.25.2021 11:00	
BTEX by EPA 8021B	<i>Extracted:</i>	01.27.2021 15:00	01.27.2021 15:00	01.27.2021 15:00	01.27.2021 15:00	01.27.2021 15:00	
	<i>Analyzed:</i>	01.27.2021 19:17	01.27.2021 19:38	01.27.2021 19:59	01.27.2021 20:19	01.27.2021 20:40	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	
m,p-Xylenes		<0.00401 0.00401	<0.00403 0.00403	<0.00404 0.00404	<0.00404 0.00404	<0.00402 0.00402	
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	
Total Xylenes		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	
Total BTEX		<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	
Chloride by EPA 300	<i>Extracted:</i>	01.27.2021 15:55	01.27.2021 15:55	01.27.2021 15:55	01.27.2021 15:55	01.27.2021 15:55	
	<i>Analyzed:</i>	01.27.2021 19:21	01.27.2021 19:27	01.27.2021 19:32	01.27.2021 19:37	01.27.2021 19:42	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		2530 25.0	9110 49.6	5870 49.5	29100 250	2020 25.2	
TPH By SW8015 Mod	<i>Extracted:</i>	01.27.2021 17:00	01.27.2021 17:00	01.27.2021 17:00	01.27.2021 17:00	01.27.2021 17:00	
	<i>Analyzed:</i>	01.28.2021 07:34	01.28.2021 07:54	01.28.2021 08:16	01.28.2021 07:54	01.28.2021 08:16	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	61.1 50.0	<50.0 50.0	
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	61.1 50.0	<50.0 50.0	

BRL - Below Reporting Limit

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



Analytical Report 686161

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Kersey State Battery Historical

11986

01.29.2021

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.29.2021

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **686161**

Kersey State Battery Historical

Project Address: Rural Eddy County, NM

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 686161. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 686161 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 686161****Etech Environmental & Safety Solution, Inc, Midland, TX**

Kersey State Battery Historical

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NW	S	01.25.2021 10:00		686161-001
SW1	S	01.25.2021 09:00		686161-002
E1	S	01.25.2021 11:00		686161-003
E2	S	01.25.2021 11:00		686161-004
WW1	S	01.25.2021 11:00		686161-005



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Kersey State Battery Historical

Project ID: 11986
Work Order Number(s): 686161

Report Date: 01.29.2021
Date Received: 01.27.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3149350 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7720228-1-BSD,686161-004.



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: NW
Lab Sample Id: 686161-001

Matrix: Soil
Date Collected: 01.25.2021 10:00

Date Received: 01.27.2021 11:50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.27.2021 15:55

% Moisture:
Basis: Wet Weight

Seq Number: 3149202

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2530	25.0	mg/kg	01.27.2021 19:21		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.27.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 07:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 07:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 07:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 07:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	01.28.2021 07:34	
o-Terphenyl	84-15-1	109	%	70-130	01.28.2021 07:34	



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: NW
Lab Sample Id: 686161-001

Matrix: Soil
Date Collected: 01.25.2021 10:00

Date Received: 01.27.2021 11:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.27.2021 15:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149158

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.27.2021 19:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.27.2021 19:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.27.2021 19:17	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.27.2021 19:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.27.2021 19:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.27.2021 19:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.27.2021 19:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	122	%	70-130	01.27.2021 19:17		
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.27.2021 19:17		



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: **SW1**
Lab Sample Id: 686161-002

Matrix: Soil
Date Collected: 01.25.2021 09:00

Date Received: 01.27.2021 11:50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.27.2021 15:55

% Moisture:
Basis: Wet Weight

Seq Number: 3149202

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9110	49.6	mg/kg	01.27.2021 19:27		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.27.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149365

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.28.2021 07:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.28.2021 07:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.28.2021 07:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.28.2021 07:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	01.28.2021 07:54	
o-Terphenyl	84-15-1	114	%	70-130	01.28.2021 07:54	



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: **SW1**
 Lab Sample Id: 686161-002

Matrix: Soil
 Date Collected: 01.25.2021 09:00

Date Received: 01.27.2021 11:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.27.2021 15:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3149158

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.27.2021 19:38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.27.2021 19:38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.27.2021 19:38	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.27.2021 19:38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.27.2021 19:38	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.27.2021 19:38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.27.2021 19:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.27.2021 19:38	
4-Bromofluorobenzene	460-00-4	120	%	70-130	01.27.2021 19:38	



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: **E1** Matrix: Soil Date Received: 01.27.2021 11:50
 Lab Sample Id: 686161-003 Date Collected: 01.25.2021 11:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.27.2021 15:55 % Moisture:
 Seq Number: 3149202 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5870	49.5	mg/kg	01.27.2021 19:32		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.27.2021 17:00 % Moisture:
 Seq Number: 3149365 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 08:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 08:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 08:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 08:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	01.28.2021 08:16	
o-Terphenyl	84-15-1	129	%	70-130	01.28.2021 08:16	



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: **E1**
 Lab Sample Id: 686161-003

Matrix: Soil
 Date Collected: 01.25.2021 11:00

Date Received: 01.27.2021 11:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.27.2021 15:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3149158

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.27.2021 19:59	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.27.2021 19:59	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.27.2021 19:59	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.27.2021 19:59	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.27.2021 19:59	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.27.2021 19:59	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.27.2021 19:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.27.2021 19:59	
4-Bromofluorobenzene	460-00-4	116	%	70-130	01.27.2021 19:59	



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: **E2**
Lab Sample Id: 686161-004

Matrix: Soil
Date Collected: 01.25.2021 11:00

Date Received: 01.27.2021 11:50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.27.2021 15:55

% Moisture:
Basis: Wet Weight

Seq Number: 3149202

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29100	250	mg/kg	01.27.2021 19:37		50

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.27.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 07:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	61.1	50.0	mg/kg	01.28.2021 07:54		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 07:54	U	1
Total TPH	PHC635	61.1	50.0	mg/kg	01.28.2021 07:54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	01.28.2021 07:54	
o-Terphenyl	84-15-1	136	%	70-130	01.28.2021 07:54	**



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: **E2**
 Lab Sample Id: 686161-004

Matrix: Soil
 Date Collected: 01.25.2021 11:00

Date Received: 01.27.2021 11:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.27.2021 15:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3149158

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.27.2021 20:19	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.27.2021 20:19	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.27.2021 20:19	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.27.2021 20:19	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.27.2021 20:19	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.27.2021 20:19	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.27.2021 20:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	01.27.2021 20:19		
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.27.2021 20:19		



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: **WW1**
Lab Sample Id: 686161-005

Matrix: Soil
Date Collected: 01.25.2021 11:00

Date Received: 01.27.2021 11:50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.27.2021 15:55

% Moisture:
Basis: Wet Weight

Seq Number: 3149202

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2020	25.2	mg/kg	01.27.2021 19:42		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.27.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149350

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 08:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 08:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 08:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 08:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	01.28.2021 08:16	
o-Terphenyl	84-15-1	128	%	70-130	01.28.2021 08:16	



Certificate of Analytical Results 686161

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery Historical

Sample Id: **WW1**
Lab Sample Id: 686161-005

Matrix: Soil
Date Collected: 01.25.2021 11:00

Date Received: 01.27.2021 11:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.27.2021 15:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149158

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.27.2021 20:40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.27.2021 20:40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.27.2021 20:40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.27.2021 20:40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.27.2021 20:40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.27.2021 20:40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.27.2021 20:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.27.2021 20:40		
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.27.2021 20:40		



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc

Kersey State Battery Historical

Analytical Method: Chloride by EPA 300

Seq Number: 3149202

MB Sample Id: 7720148-1-BLK

Matrix: Solid

LCS Sample Id: 7720148-1-BKS

Prep Method: E300P

Date Prep: 01.27.2021

LCSD Sample Id: 7720148-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	260	104	258	103	90-110	1	20	mg/kg	01.27.2021 18:19	

Analytical Method: Chloride by EPA 300

Seq Number: 3149202

Parent Sample Id: 686161-005

Matrix: Soil

MS Sample Id: 686161-005 S

Prep Method: E300P

Date Prep: 01.27.2021

MSD Sample Id: 686161-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2020	1260	3170	91	3150	90	90-110	1	20	mg/kg	01.27.2021 19:47	

Analytical Method: Chloride by EPA 300

Seq Number: 3149202

Parent Sample Id: 686210-001

Matrix: Soil

MS Sample Id: 686210-001 S

Prep Method: E300P

Date Prep: 01.27.2021

MSD Sample Id: 686210-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.04	252	277	110	249	98	90-110	11	20	mg/kg	01.27.2021 18:35	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149350

MB Sample Id: 7720228-1-BLK

Matrix: Solid

LCS Sample Id: 7720228-1-BKS

Prep Method: SW8015P

Date Prep: 01.27.2021

LCSD Sample Id: 7720228-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	947	95	955	96	70-130	1	20	mg/kg	01.27.2021 22:57	
Diesel Range Organics (DRO)	<50.0	1000	942	94	955	96	70-130	1	20	mg/kg	01.27.2021 22:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	85		99		99		70-130	%	01.27.2021 22:57
o-Terphenyl	122		129		131	**	70-130	%	01.27.2021 22:57

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149365

MB Sample Id: 7720231-1-BLK

Matrix: Solid

LCS Sample Id: 7720231-1-BKS

Prep Method: SW8015P

Date Prep: 01.27.2021

LCSD Sample Id: 7720231-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	962	96	923	92	70-130	4	20	mg/kg	01.27.2021 22:57	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	985	99	70-130	3	20	mg/kg	01.27.2021 22:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		98		102		70-130	%	01.27.2021 22:57
o-Terphenyl	119		102		100		70-130	%	01.27.2021 22:57

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

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

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

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



Etech Environmental & Safety Solution, Inc

Kersey State Battery Historical

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149350

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.27.2021

MB Sample Id: 7720228-1-BLK

Parameter

	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.27.2021 22:36	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149365

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.27.2021

MB Sample Id: 7720231-1-BLK

Parameter

	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.27.2021 22:36	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149350

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.28.2021

Parent Sample Id: 685876-001

MS Sample Id: 685876-001 S

MSD Sample Id: 685876-001 SD

Parameter

	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	966	97	918	92	70-130	5	20	mg/kg	01.28.2021 00:01	
Diesel Range Organics (DRO)	<49.9	997	968	97	913	92	70-130	6	20	mg/kg	01.28.2021 00:01	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		84		70-130	%	01.28.2021 00:01
o-Terphenyl	107		104		70-130	%	01.28.2021 00:01

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149365

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.27.2021

Parent Sample Id: 685933-001

MS Sample Id: 685933-001 S

MSD Sample Id: 685933-001 SD

Parameter

	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	103	997	968	87	945	85	70-130	2	20	mg/kg	01.28.2021 00:01	
Diesel Range Organics (DRO)	374	997	1130	76	1100	73	70-130	3	20	mg/kg	01.28.2021 00:01	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	100		102		70-130	%	01.28.2021 00:01
o-Terphenyl	97		95		70-130	%	01.28.2021 00:01

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

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

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

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



Etech Environmental & Safety Solution, Inc

Kersey State Battery Historical

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149158

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.27.2021

MB Sample Id: 7720185-1-BLK

LCS Sample Id: 7720185-1-BKS

LCSD Sample Id: 7720185-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0804	80	0.0787	79	70-130	2	35	mg/kg	01.27.2021 16:14	
Toluene	<0.00200	0.100	0.0868	87	0.0794	79	70-130	9	35	mg/kg	01.27.2021 16:14	
Ethylbenzene	<0.00200	0.100	0.0863	86	0.0833	83	70-130	4	35	mg/kg	01.27.2021 16:14	
m,p-Xylenes	<0.00400	0.200	0.160	80	0.154	77	70-130	4	35	mg/kg	01.27.2021 16:14	
o-Xylene	<0.00200	0.100	0.0904	90	0.0836	84	70-130	8	35	mg/kg	01.27.2021 16:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		107		107		70-130	%	01.27.2021 16:14
4-Bromofluorobenzene	119		103		104		70-130	%	01.27.2021 16:14

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149158

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.27.2021

Parent Sample Id: 685949-002

MS Sample Id: 685949-002 S

MSD Sample Id: 685949-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0839	84	0.105	106	70-130	22	35	mg/kg	01.27.2021 16:55	
Toluene	0.00250	0.0996	0.0930	91	0.0991	98	70-130	6	35	mg/kg	01.27.2021 16:55	
Ethylbenzene	<0.00199	0.0996	0.0876	88	0.0928	94	70-130	6	35	mg/kg	01.27.2021 16:55	
m,p-Xylenes	<0.00398	0.199	0.178	89	0.178	90	70-130	0	35	mg/kg	01.27.2021 16:55	
o-Xylene	<0.00199	0.0996	0.0991	99	0.106	107	70-130	7	35	mg/kg	01.27.2021 16:55	

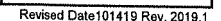
Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		108		70-130	%	01.27.2021 16:55
4-Bromofluorobenzene	118		119		70-130	%	01.27.2021 16:55

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

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

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

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



Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 01.27.2021 11.50.00 AM

Work Order #: 686161

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 01.27.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.27.2021

Certificate of Analysis Summary 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Kersey State Battery

Project Id: 12653
Contact: PM
Project Location: Rural Eddy County

Date Received in Lab: Wed 01.27.2021 11:50
Report Date: 02.02.2021 09:28
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	686159-001	686159-002	686159-003	686159-004	686159-005	686159-006
	<i>Field Id:</i>	FL 1 @ 8"	FL 2 @ 8"	FL 3 @ 8	FL 4 @ 2'	SP1-D	SP2-D
	<i>Depth:</i>	8- In	8- In	8- In	2- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.26.2021 09:00	01.26.2021 09:30	01.26.2021 10:00	01.26.2021 10:45	01.26.2021 12:00	01.26.2021 12:30
BTEX by EPA 8021B	<i>Extracted:</i>	01.29.2021 17:15	01.29.2021 17:15	01.29.2021 17:15	01.31.2021 10:00	01.31.2021 10:00	01.31.2021 10:00
	<i>Analyzed:</i>	01.31.2021 00:59	01.31.2021 01:19	01.31.2021 01:40	01.31.2021 16:10	01.31.2021 16:36	01.31.2021 17:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	0.00828 0.00201
Toluene		<0.00200 0.00200	<0.00201 0.00201	0.0185 0.00200	<0.00200 0.00200	0.00212 0.00202	0.00640 0.00201
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	0.00207 0.00202	0.00444 0.00201
m,p-Xylenes		<0.00399 0.00399	0.0926 0.00402	0.0516 0.00399	<0.00399 0.00399	0.0134 0.00403	0.0203 0.00402
o-Xylene		<0.00200 0.00200	0.161 0.00201	0.210 0.00200	0.0514 XF 0.00200	0.0622 0.00202	0.00860 0.00201
Total Xylenes		<0.00200 0.00200	0.254 0.00201	0.262 0.00200	0.0514 0.00200	0.0756 0.00202	0.0289 0.00201
Total BTEX		<0.00200 0.00200	0.254 0.00201	0.280 0.00200	0.0514 0.00200	0.0798 0.00202	0.0480 0.00201
Chloride by EPA 300	<i>Extracted:</i>	01.28.2021 16:45	01.28.2021 16:45	01.28.2021 16:45	01.28.2021 16:45	01.28.2021 16:45	01.28.2021 16:45
	<i>Analyzed:</i>	01.29.2021 05:38	01.29.2021 05:44	01.29.2021 05:49	01.29.2021 05:54	01.29.2021 05:59	01.29.2021 06:05
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4790 50.0	7590 50.4	16000 249	2530 24.8	7940 49.7	7680 100
TPH By SW8015 Mod	<i>Extracted:</i>	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00
	<i>Analyzed:</i>	01.30.2021 09:11	01.30.2021 06:30	01.30.2021 06:52	01.30.2021 05:27	01.30.2021 07:14	01.30.2021 07:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		52.3 50.0	251 249	<250 250	<50.0 50.0	<249 249	<250 250
Diesel Range Organics (DRO)		5540 50.0	20900 249	12000 250	114 50.0	19900 249	22900 250
Motor Oil Range Hydrocarbons (MRO)		900 50.0	2860 249	1800 250	<50.0 50.0	3600 249	3460 250
Total TPH		11800 50.0	24000 249	13800 250	114 50.0	23500 249	26400 250

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Kersey State Battery

Project Id: 12653
Contact: PM
Project Location: Rural Eddy County

Date Received in Lab: Wed 01.27.2021 11:50
Report Date: 02.02.2021 09:28
Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 686159-007 Field Id: WH-D Depth: Matrix: SOIL Sampled: 01.26.2021 13:00					
BTEX by EPA 8021B	Extracted: 01.31.2021 10:00 Analyzed: 01.31.2021 17:28 Units/RL: mg/kg RL					
Benzene	<0.00200 0.00200					
Toluene	0.00562 0.00200					
Ethylbenzene	<0.00200 0.00200					
m,p-Xylenes	0.0444 0.00401					
o-Xylene	0.117 0.00200					
Total Xylenes	0.161 0.00200					
Total BTEX	0.167 0.00200					
Chloride by EPA 300	Extracted: 01.28.2021 16:45 Analyzed: 01.29.2021 06:21 Units/RL: mg/kg RL					
Chloride	4310 50.3					
TPH By SW8015 Mod	Extracted: 01.29.2021 17:00 Analyzed: 01.30.2021 05:48 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	<49.9 49.9					
Diesel Range Organics (DRO)	<49.9 49.9					
Motor Oil Range Hydrocarbons (MRO)	<49.9 49.9					
Total TPH	<49.9 49.9					

BRL - Below Reporting Limit

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



Analytical Report 686159

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Kersey State Battery

12653

02.02.2021

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.02.2021

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **686159**

Kersey State Battery

Project Address: Rural Eddy County

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 686159. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 686159 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 686159****Etech Environmental & Safety Solution, Inc, Midland, TX**

Kersey State Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL 1 @ 8"	S	01.26.2021 09:00	8 In	686159-001
FL 2 @ 8"	S	01.26.2021 09:30	8 In	686159-002
FL 3 @ 8"	S	01.26.2021 10:00	8 In	686159-003
FL 4 @ 2'	S	01.26.2021 10:45	2 ft	686159-004
SP1-D	S	01.26.2021 12:00		686159-005
SP2-D	S	01.26.2021 12:30		686159-006
WH-D	S	01.26.2021 13:00		686159-007

**CASE NARRATIVE****Client Name: Etech Environmental & Safety Solution, Inc****Project Name: Kersey State Battery**Project ID: 12653
Work Order Number(s): 686159Report Date: 02.02.2021
Date Received: 01.27.2021**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3149479 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Samples affected are: 7720417-1-BLK,686159-002.

Batch: LBA-3149530 BTEX by EPA 8021B

Surrogate 1,4-Difluorobenzene recovered below QC limits. Matrix interferences is suspected; Samples affected are: 686159-004 S,686159-004 SD.

Lab Sample ID 686159-004 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 686159-004, -005, -006, -007.

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

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

Samples in the analytical batch are: 686159-004, -005, -006, -007

Batch: LBA-3149602 TPH By SW8015 Mod

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

Samples affected are: 686159-003,686159-001,686159-006,686159-005.



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **FL 1 @ 8"**

Matrix: Soil

Date Received: 01.27.2021 11:50

Lab Sample Id: 686159-001

Date Collected: 01.26.2021 09:00

Sample Depth: 8 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.28.2021 16:45

% Moisture:

Seq Number: 3149321

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4790	50.0	mg/kg	01.29.2021 05:38		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.29.2021 17:00

% Moisture:

Seq Number: 3149602

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	52.3	50.0	mg/kg	01.30.2021 09:11		1
Diesel Range Organics (DRO)	C10C28DRO	5540	50.0	mg/kg	01.30.2021 09:11		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	900	50.0	mg/kg	01.30.2021 09:11		1
Total TPH	PHC635	11800	50.0	mg/kg	01.30.2021 09:11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	01.30.2021 09:11	
o-Terphenyl	84-15-1	198	%	70-130	01.30.2021 09:11	**



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **FL 1 @ 8"**

Matrix: Soil

Date Received: 01.27.2021 11:50

Lab Sample Id: 686159-001

Date Collected: 01.26.2021 09:00

Sample Depth: 8 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:

Seq Number: 3149479

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 00:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 00:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 00:59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.31.2021 00:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 00:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 00:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 00:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	130	%	70-130	01.31.2021 00:59		
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.31.2021 00:59		



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **FL 2 @ 8"**

Matrix: Soil

Date Received: 01.27.2021 11:50

Lab Sample Id: 686159-002

Date Collected: 01.26.2021 09:30

Sample Depth: 8 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.28.2021 16:45

% Moisture:

Seq Number: 3149321

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7590	50.4	mg/kg	01.29.2021 05:44		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.29.2021 17:00

% Moisture:

Seq Number: 3149602

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	251	249	mg/kg	01.30.2021 06:30		5
Diesel Range Organics (DRO)	C10C28DRO	20900	249	mg/kg	01.30.2021 06:30		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	2860	249	mg/kg	01.30.2021 06:30		5
Total TPH	PHC635	24000	249	mg/kg	01.30.2021 06:30		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	01.30.2021 06:30	
o-Terphenyl	84-15-1	80	%	70-130	01.30.2021 06:30	



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **FL 2 @ 8"**

Matrix: Soil

Date Received: 01.27.2021 11:50

Lab Sample Id: 686159-002

Date Collected: 01.26.2021 09:30

Sample Depth: 8 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:

Seq Number: 3149479

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.2021 01:19	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.31.2021 01:19	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.2021 01:19	U	1
m,p-Xylenes	179601-23-1	0.0926	0.00402	mg/kg	01.31.2021 01:19		1
o-Xylene	95-47-6	0.161	0.00201	mg/kg	01.31.2021 01:19		1
Total Xylenes	1330-20-7	0.254	0.00201	mg/kg	01.31.2021 01:19		1
Total BTEX		0.254	0.00201	mg/kg	01.31.2021 01:19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	181	%	70-130	01.31.2021 01:19	**
1,4-Difluorobenzene	540-36-3	86	%	70-130	01.31.2021 01:19	



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **FL 3 @ 8**
Lab Sample Id: 686159-003

Matrix: Soil
Date Collected: 01.26.2021 10:00

Date Received: 01.27.2021 11:50
Sample Depth: 8 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.28.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3149321

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16000	249	mg/kg	01.29.2021 05:49		50

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149602

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<250	250	mg/kg	01.30.2021 06:52	U	5
Diesel Range Organics (DRO)	C10C28DRO	12000	250	mg/kg	01.30.2021 06:52		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1800	250	mg/kg	01.30.2021 06:52		5
Total TPH	PHC635	13800	250	mg/kg	01.30.2021 06:52		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	01.30.2021 06:52	
o-Terphenyl	84-15-1	234	%	70-130	01.30.2021 06:52	**



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **FL 3 @ 8**
 Lab Sample Id: 686159-003

Matrix: Soil
 Date Collected: 01.26.2021 10:00

Date Received: 01.27.2021 11:50
 Sample Depth: 8 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:15

% Moisture:
 Basis: Wet Weight

Seq Number: 3149479

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 01:40	U	1
Toluene	108-88-3	0.0185	0.00200	mg/kg	01.31.2021 01:40		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 01:40	U	1
m,p-Xylenes	179601-23-1	0.0516	0.00399	mg/kg	01.31.2021 01:40		1
o-Xylene	95-47-6	0.210	0.00200	mg/kg	01.31.2021 01:40		1
Total Xylenes	1330-20-7	0.262	0.00200	mg/kg	01.31.2021 01:40		1
Total BTEX		0.280	0.00200	mg/kg	01.31.2021 01:40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	70-130	01.31.2021 01:40	
4-Bromofluorobenzene	460-00-4	128	%	70-130	01.31.2021 01:40	



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **FL 4 @ 2'**
Lab Sample Id: 686159-004

Matrix: Soil
Date Collected: 01.26.2021 10:45

Date Received: 01.27.2021 11:50
Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.28.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3149321

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2530	24.8	mg/kg	01.29.2021 05:54		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149602

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.30.2021 05:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	114	50.0	mg/kg	01.30.2021 05:27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.30.2021 05:27	U	1
Total TPH	PHC635	114	50.0	mg/kg	01.30.2021 05:27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	01.30.2021 05:27	
o-Terphenyl	84-15-1	109	%	70-130	01.30.2021 05:27	



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **FL 4 @ 2'**

Matrix: Soil

Date Received: 01.27.2021 11:50

Lab Sample Id: 686159-004

Date Collected: 01.26.2021 10:45

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.31.2021 10:00

% Moisture:

Seq Number: 3149530

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 16:10	UXF	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 16:10	UX	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 16:10	UXF	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.31.2021 16:10	UX	1
o-Xylene	95-47-6	0.0514	0.00200	mg/kg	01.31.2021 16:10	XF	1
Total Xylenes	1330-20-7	0.0514	0.00200	mg/kg	01.31.2021 16:10		1
Total BTEX		0.0514	0.00200	mg/kg	01.31.2021 16:10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	71	%	70-130	01.31.2021 16:10	
4-Bromofluorobenzene	460-00-4	119	%	70-130	01.31.2021 16:10	



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **SP1-D**
Lab Sample Id: 686159-005

Matrix: Soil
Date Collected: 01.26.2021 12:00

Date Received: 01.27.2021 11:50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.28.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3149321

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7940	49.7	mg/kg	01.29.2021 05:59		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149602

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<249	249	mg/kg	01.30.2021 07:14	U	5
Diesel Range Organics (DRO)	C10C28DRO	19900	249	mg/kg	01.30.2021 07:14		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	3600	249	mg/kg	01.30.2021 07:14		5
Total TPH	PHC635	23500	249	mg/kg	01.30.2021 07:14		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-130	01.30.2021 07:14	
o-Terphenyl	84-15-1	206	%	70-130	01.30.2021 07:14	**



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **SP1-D**
Lab Sample Id: 686159-005

Matrix: Soil
Date Collected: 01.26.2021 12:00

Date Received: 01.27.2021 11:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.31.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149530

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.31.2021 16:36	U	1
Toluene	108-88-3	0.00212	0.00202	mg/kg	01.31.2021 16:36		1
Ethylbenzene	100-41-4	0.00207	0.00202	mg/kg	01.31.2021 16:36		1
m,p-Xylenes	179601-23-1	0.0134	0.00403	mg/kg	01.31.2021 16:36		1
o-Xylene	95-47-6	0.0622	0.00202	mg/kg	01.31.2021 16:36		1
Total Xylenes	1330-20-7	0.0756	0.00202	mg/kg	01.31.2021 16:36		1
Total BTEX		0.0798	0.00202	mg/kg	01.31.2021 16:36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	01.31.2021 16:36	
1,4-Difluorobenzene	540-36-3	71	%	70-130	01.31.2021 16:36	



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **SP2-D**
Lab Sample Id: 686159-006

Matrix: Soil
Date Collected: 01.26.2021 12:30

Date Received: 01.27.2021 11:50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.28.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3149321

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7680	100	mg/kg	01.29.2021 06:05		20

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149602

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<250	250	mg/kg	01.30.2021 07:35	U	5
Diesel Range Organics (DRO)	C10C28DRO	22900	250	mg/kg	01.30.2021 07:35		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	3460	250	mg/kg	01.30.2021 07:35		5
Total TPH	PHC635	26400	250	mg/kg	01.30.2021 07:35		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	01.30.2021 07:35	
o-Terphenyl	84-15-1	356	%	70-130	01.30.2021 07:35	**



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **SP2-D**
 Lab Sample Id: 686159-006

Matrix: Soil
 Date Collected: 01.26.2021 12:30

Date Received: 01.27.2021 11:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.31.2021 10:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3149530

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00828	0.00201	mg/kg	01.31.2021 17:02		1
Toluene	108-88-3	0.00640	0.00201	mg/kg	01.31.2021 17:02		1
Ethylbenzene	100-41-4	0.00444	0.00201	mg/kg	01.31.2021 17:02		1
m,p-Xylenes	179601-23-1	0.0203	0.00402	mg/kg	01.31.2021 17:02		1
o-Xylene	95-47-6	0.00860	0.00201	mg/kg	01.31.2021 17:02		1
Total Xylenes	1330-20-7	0.0289	0.00201	mg/kg	01.31.2021 17:02		1
Total BTEX		0.0480	0.00201	mg/kg	01.31.2021 17:02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	81	%	70-130	01.31.2021 17:02	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.31.2021 17:02	



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **WH-D**
Lab Sample Id: 686159-007

Matrix: Soil
Date Collected: 01.26.2021 13:00

Date Received: 01.27.2021 11:50

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.28.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3149321

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4310	50.3	mg/kg	01.29.2021 06:21		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149602

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.30.2021 05:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.30.2021 05:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.30.2021 05:48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.30.2021 05:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-130	01.30.2021 05:48	
o-Terphenyl	84-15-1	104	%	70-130	01.30.2021 05:48	



Certificate of Analytical Results 686159

Etech Environmental & Safety Solution, Inc, Midland, TX

Kersey State Battery

Sample Id: **WH-D**
Lab Sample Id: 686159-007

Matrix: Soil
Date Collected: 01.26.2021 13:00

Date Received: 01.27.2021 11:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.31.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149530

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 17:28	U	1
Toluene	108-88-3	0.00562	0.00200	mg/kg	01.31.2021 17:28		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 17:28	U	1
m,p-Xylenes	179601-23-1	0.0444	0.00401	mg/kg	01.31.2021 17:28		1
o-Xylene	95-47-6	0.117	0.00200	mg/kg	01.31.2021 17:28		1
Total Xylenes	1330-20-7	0.161	0.00200	mg/kg	01.31.2021 17:28		1
Total BTEX		0.167	0.00200	mg/kg	01.31.2021 17:28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	125	%	70-130	01.31.2021 17:28	
1,4-Difluorobenzene	540-36-3	83	%	70-130	01.31.2021 17:28	

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc

Kersey State Battery

Analytical Method: Chloride by EPA 300

Seq Number: 3149321

MB Sample Id: 7720253-1-BLK

Matrix: Solid

LCS Sample Id: 7720253-1-BKS

Prep Method: E300P

Date Prep: 01.28.2021

LCSD Sample Id: 7720253-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	269	108	258	103	90-110	4	20	mg/kg	01.29.2021 04:40	

Analytical Method: Chloride by EPA 300

Seq Number: 3149321

Parent Sample Id: 686158-004

Matrix: Soil

MS Sample Id: 686158-004 S

Prep Method: E300P

Date Prep: 01.28.2021

MSD Sample Id: 686158-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	27.2	249	290	106	294	107	90-110	1	20	mg/kg	01.29.2021 04:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3149321

Parent Sample Id: 686159-006

Matrix: Soil

MS Sample Id: 686159-006 S

Prep Method: E300P

Date Prep: 01.28.2021

MSD Sample Id: 686159-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7680	5000	13000	106	13200	110	90-110	2	20	mg/kg	01.29.2021 06:10	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149602

MB Sample Id: 7720491-1-BLK

Matrix: Solid

LCS Sample Id: 7720491-1-BKS

Prep Method: SW8015P

Date Prep: 01.29.2021

LCSD Sample Id: 7720491-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	940	94	1000	100	70-130	6	20	mg/kg	01.29.2021 22:58	
Diesel Range Organics (DRO)	<50.0	1000	972	97	975	98	70-130	0	20	mg/kg	01.29.2021 22:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		119		119		70-130	%	01.29.2021 22:58
o-Terphenyl	104		105		106		70-130	%	01.29.2021 22:58

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149602

Matrix: Solid

MB Sample Id: 7720491-1-BLK

Prep Method: SW8015P

Date Prep: 01.29.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.29.2021 22:37	

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

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

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

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



Etech Environmental & Safety Solution, Inc

Kersey State Battery

Analytical Method: TPH By SW8015 Mod

Seq Number: 3149602

Parent Sample Id: 686479-002

Matrix: Soil

MS Sample Id: 686479-002 S

Prep Method: SW8015P

Date Prep: 01.29.2021

MSD Sample Id: 686479-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	1070	107	989	99	70-130	8	20	mg/kg	01.30.2021 00:03	
Diesel Range Organics (DRO)	<49.9	997	1090	109	961	96	70-130	13	20	mg/kg	01.30.2021 00:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		106		70-130	%	01.30.2021 00:03
o-Terphenyl	107		95		70-130	%	01.30.2021 00:03

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149479

MB Sample Id: 7720417-1-BLK

Matrix: Solid

LCS Sample Id: 7720417-1-BKS

Prep Method: SW5035A

Date Prep: 01.29.2021

LCSD Sample Id: 7720417-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0981	98	0.0929	93	70-130	5	35	mg/kg	01.30.2021 15:45	
Toluene	<0.00200	0.100	0.0987	99	0.0950	95	70-130	4	35	mg/kg	01.30.2021 15:45	
Ethylbenzene	<0.00200	0.100	0.0940	94	0.0905	91	70-130	4	35	mg/kg	01.30.2021 15:45	
m,p-Xylenes	<0.00400	0.200	0.188	94	0.181	91	70-130	4	35	mg/kg	01.30.2021 15:45	
o-Xylene	<0.00200	0.100	0.0930	93	0.0889	89	70-130	5	35	mg/kg	01.30.2021 15:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		104		104		70-130	%	01.30.2021 15:45
4-Bromofluorobenzene	133	**	109		102		70-130	%	01.30.2021 15:45

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149530

MB Sample Id: 7720445-1-BLK

Matrix: Solid

LCS Sample Id: 7720445-1-BKS

Prep Method: SW5035A

Date Prep: 01.31.2021

LCSD Sample Id: 7720445-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.124	124	0.0937	94	70-130	28	35	mg/kg	01.31.2021 13:08	
Toluene	<0.00200	0.100	0.130	130	0.0995	100	70-130	27	35	mg/kg	01.31.2021 13:08	
Ethylbenzene	<0.00200	0.100	0.125	125	0.0999	100	70-130	22	35	mg/kg	01.31.2021 13:08	
m,p-Xylenes	<0.00400	0.200	0.256	128	0.207	104	70-130	21	35	mg/kg	01.31.2021 13:08	
o-Xylene	<0.00200	0.100	0.122	122	0.101	101	70-130	19	35	mg/kg	01.31.2021 13:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		94		93		70-130	%	01.31.2021 13:08
4-Bromofluorobenzene	76		128		96		70-130	%	01.31.2021 13:08

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

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

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

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



Etech Environmental & Safety Solution, Inc

Kersey State Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149479

Parent Sample Id: 686156-006

Matrix: Soil

MS Sample Id: 686156-006 S

Prep Method: SW5035A

Date Prep: 01.29.2021

MSD Sample Id: 686156-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0151	15	0.0111	11	70-130	31	35	mg/kg	01.30.2021 16:26	X
Toluene	<0.00202	0.101	0.0143	14	0.0136	14	70-130	5	35	mg/kg	01.30.2021 16:26	X
Ethylbenzene	<0.00202	0.101	0.0130	13	0.0113	11	70-130	14	35	mg/kg	01.30.2021 16:26	X
m,p-Xylenes	<0.00403	0.202	0.0268	13	0.0230	12	70-130	15	35	mg/kg	01.30.2021 16:26	X
o-Xylene	<0.00202	0.101	0.0168	17	0.0149	15	70-130	12	35	mg/kg	01.30.2021 16:26	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	113		107		70-130	%	01.30.2021 16:26
4-Bromofluorobenzene	117		118		70-130	%	01.30.2021 16:26

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149530

Parent Sample Id: 686159-004

Matrix: Soil

MS Sample Id: 686159-004 S

Prep Method: SW5035A

Date Prep: 01.31.2021

MSD Sample Id: 686159-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0218	22	0.0133	13	70-130	48	35	mg/kg	01.31.2021 13:59	XF
Toluene	<0.00199	0.0996	0.0164	16	0.0118	12	70-130	33	35	mg/kg	01.31.2021 13:59	X
Ethylbenzene	<0.00199	0.0996	0.00957	10	0.00526	5	70-130	58	35	mg/kg	01.31.2021 13:59	XF
m,p-Xylenes	<0.00398	0.199	0.0250	13	0.0286	14	70-130	13	35	mg/kg	01.31.2021 13:59	X
o-Xylene	0.0514	0.0996	0.0178	0	0.0115	0	70-130	43	35	mg/kg	01.31.2021 13:59	XF

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	63	**	69	**	70-130	%	01.31.2021 13:59
4-Bromofluorobenzene	122		75		70-130	%	01.31.2021 13:59

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

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

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

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



Chain of Custody

Work Order No: 1080159

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 Crasbad, NM (432) 704-5440

Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

www.xenco.com

Page 1 of 1

Project Manager:	Joel Lowry	Bill to: (if different)	Carmen Pitt
Company Name:	ETech Environmental & Safety	Company Name:	Grizzly Energy, LLC
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Lawton, NM 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	PM@etechenv.com + client

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other: <input type="checkbox"/>

Project Name:		Kersey State Battery		Turn Around				ANALYSIS REQUEST																Preservative Codes			
Project Number:		12652		Routine		<input checked="" type="checkbox"/>																		MeOH: Me			
Project Location		Rural Eddy County		Rush:																				None: NO			
Sampler's Name:		Miguel Ramirez		Due Date:																				HNO3: HN			
PO #:				Quote #:																				H2SO4: H2			
SAMPLE RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No																		HCL: HL	
Temperature (°C):		12				Thermometer ID		120																		NaOH: Na	
Received Intact:		Yes No																								Zn Acetate+ NaOH: Zn	
Cooler Custody Seals:		Yes No N/A				Correction Factor:		5																		TAT starts the day received by the lab, if received by 4:00pm	
Sample Custody Seals:		Yes No N/A				Total Containers:																				Sample Comments	
Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers																					
	FL 1 @ 8"	S	1-26-21	09:00	8"	1	Chlorides	BTEX	TPH																		
	FL 2 @ 8"	S	1-26-21	09:30	8"	1	X	X	X																		
	FL 3 @ 8"	S	1-26-21	10:00	8"	1	X	X	X																		
	FL 4 @ 2'	S	1-26-21	10:45	2'	1	X	X	X																		
	SP1-D	S	1-26-21	12:00	-	1	X	X	X																		
	SP2-D	S	1-26-21	12:30	-	1	X	X	X																		
	WH-D	S	1-26-21	1:00	-	1	X	X	X																		

Total 200.7 / 6010 200.8 / 6020:

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

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

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

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 <u>Miguel Ramirez</u>	1 <u>NJR</u>	4:35/1-26	2 <u>NJR</u>	2 <u>MA</u>	1-27-21/11:55
3			4		
5			6		

Revised Date 022619 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 01.27.2021 11.50.00 AM

Work Order #: 686159

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist**Comments**

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 01.27.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.27.2021



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

February 02, 2021

JOEL LOWRY

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: KERSEY STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/01/21 16:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

Etech Environmental & Safety Solutions
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/01/2021	Sampling Date:	02/01/2021
Reported:	02/02/2021	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	** (See Notes)
Project Number:	12652	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: EW 2B (H210249-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2400	16.0	02/02/2021	ND	400	100	400	4.08	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Rush!

1 of

Page 4 of 4

[illegible]



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

February 03, 2021

JOEL LOWRY

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: KERSEY STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 02/01/21 16:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

Etech Environmental & Safety Solutions
 JOEL LOWRY
 P.O. Box 301
 Lovington NM, 88260
 Fax To: (575) 396-1429

Received:	02/01/2021	Sampling Date:	02/01/2021
Reported:	02/03/2021	Sampling Type:	Soil
Project Name:	KERSEY STATE BATTERY	Sampling Condition:	** (See Notes)
Project Number:	12652	Sample Received By:	Tamara Oldaker
Project Location:	RURAL EDDY - GRIZZLY ENERGY		

Sample ID: ND (H210250-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/03/2021	ND	416	104	400	3.92	

Sample ID: ED (H210250-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	02/03/2021	ND	416	104	400	3.92	

Sample ID: SD (H210250-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/03/2021	ND	416	104	400	3.92	

Sample ID: WD (H210250-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/03/2021	ND	416	104	400	3.92	

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

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*=Accredited Analyte

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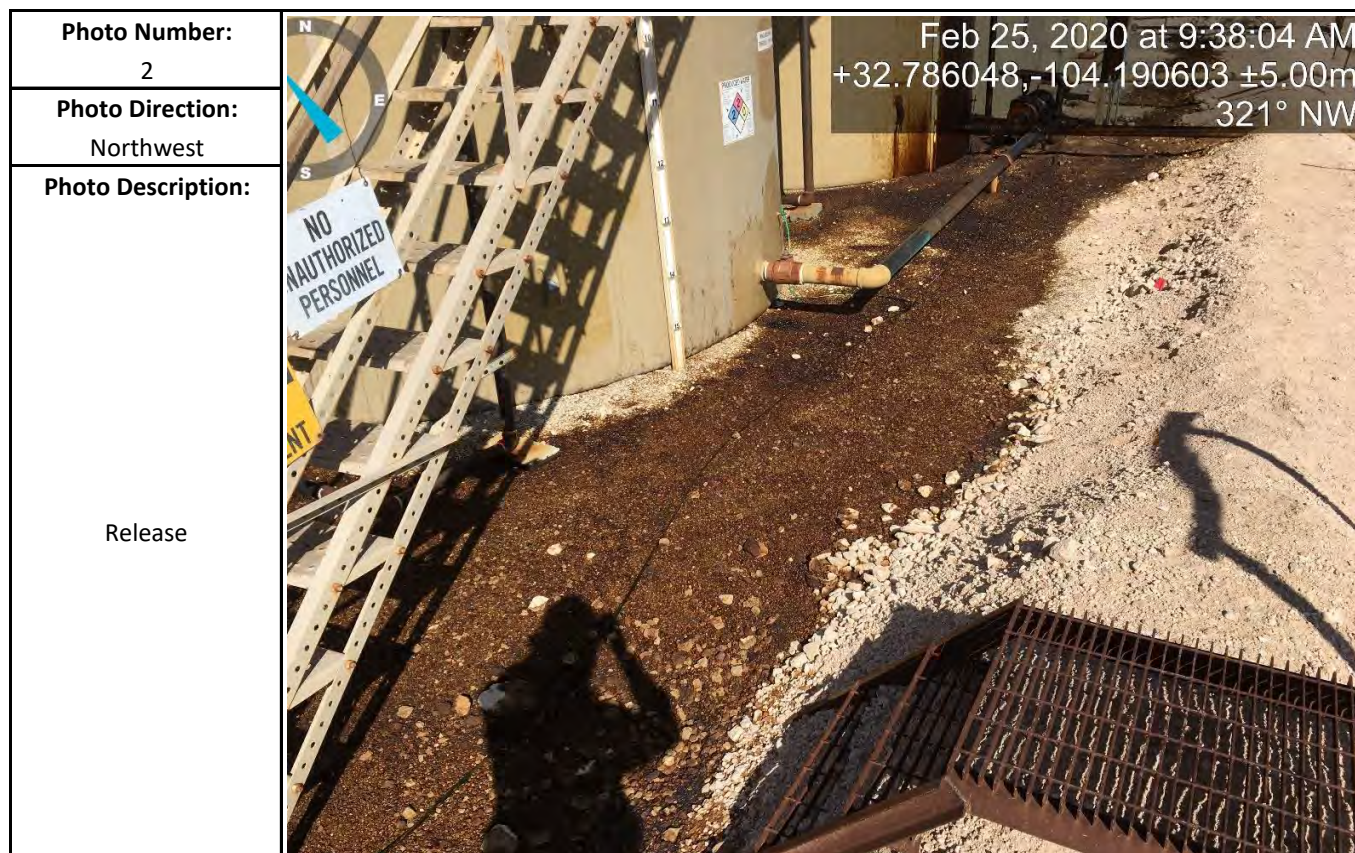
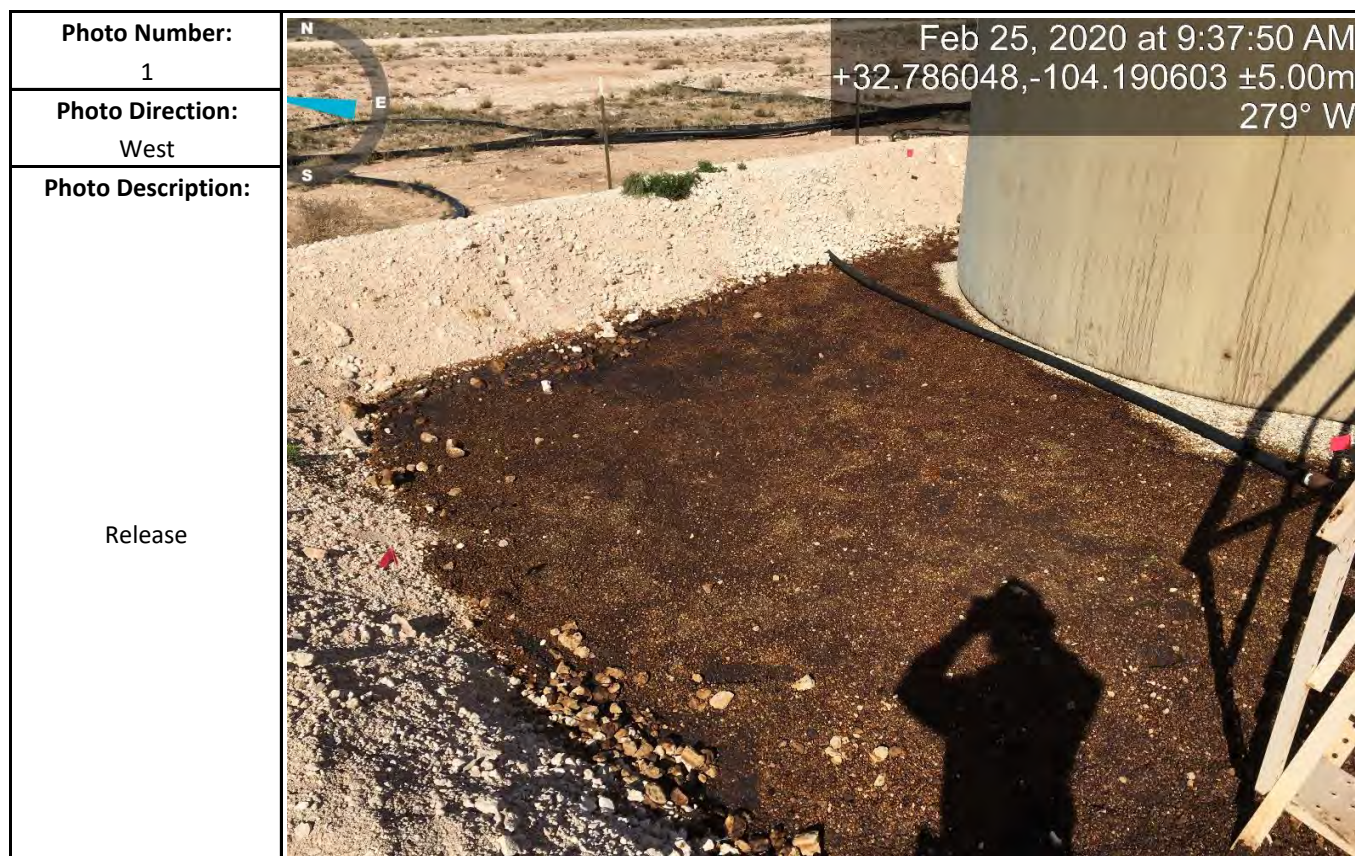
A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

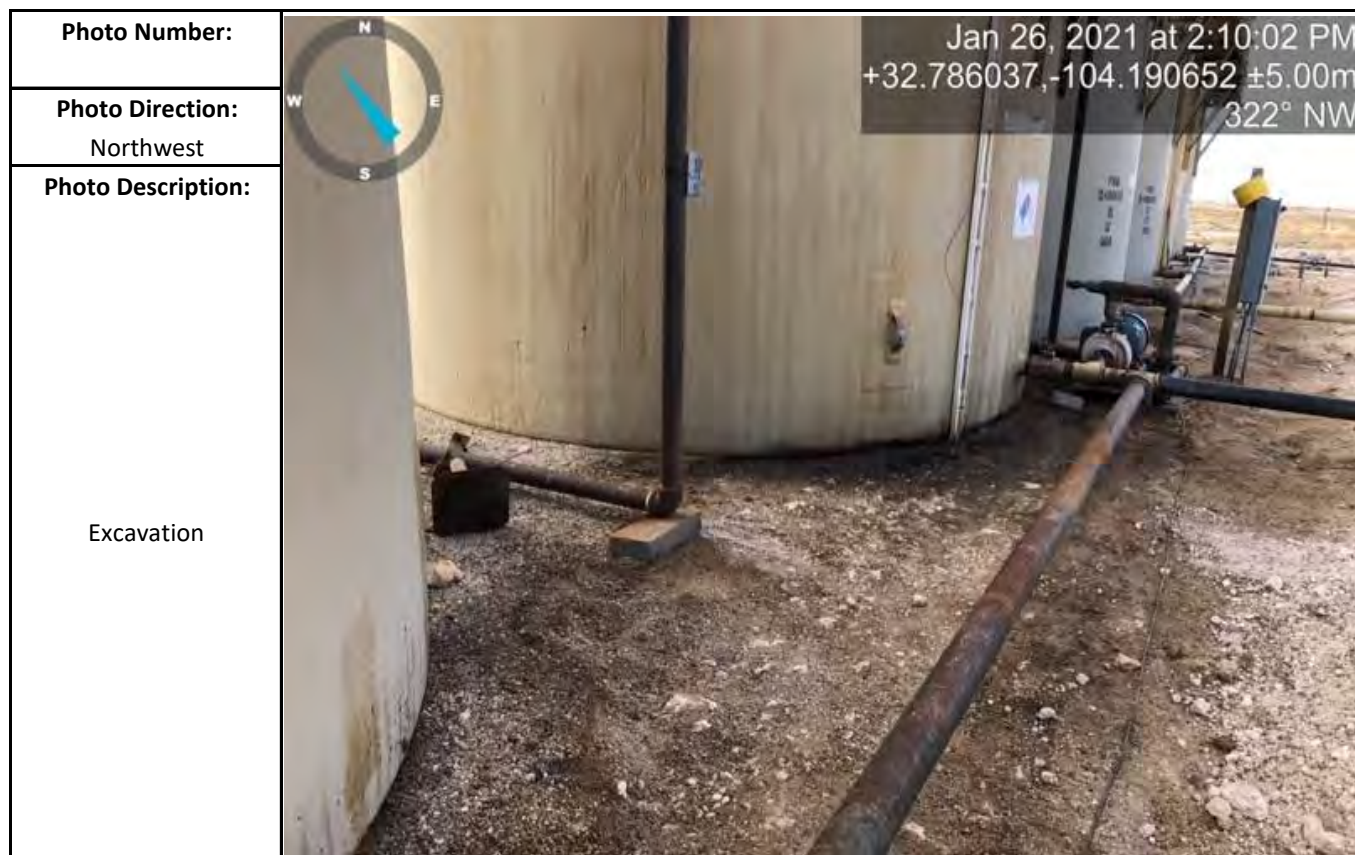
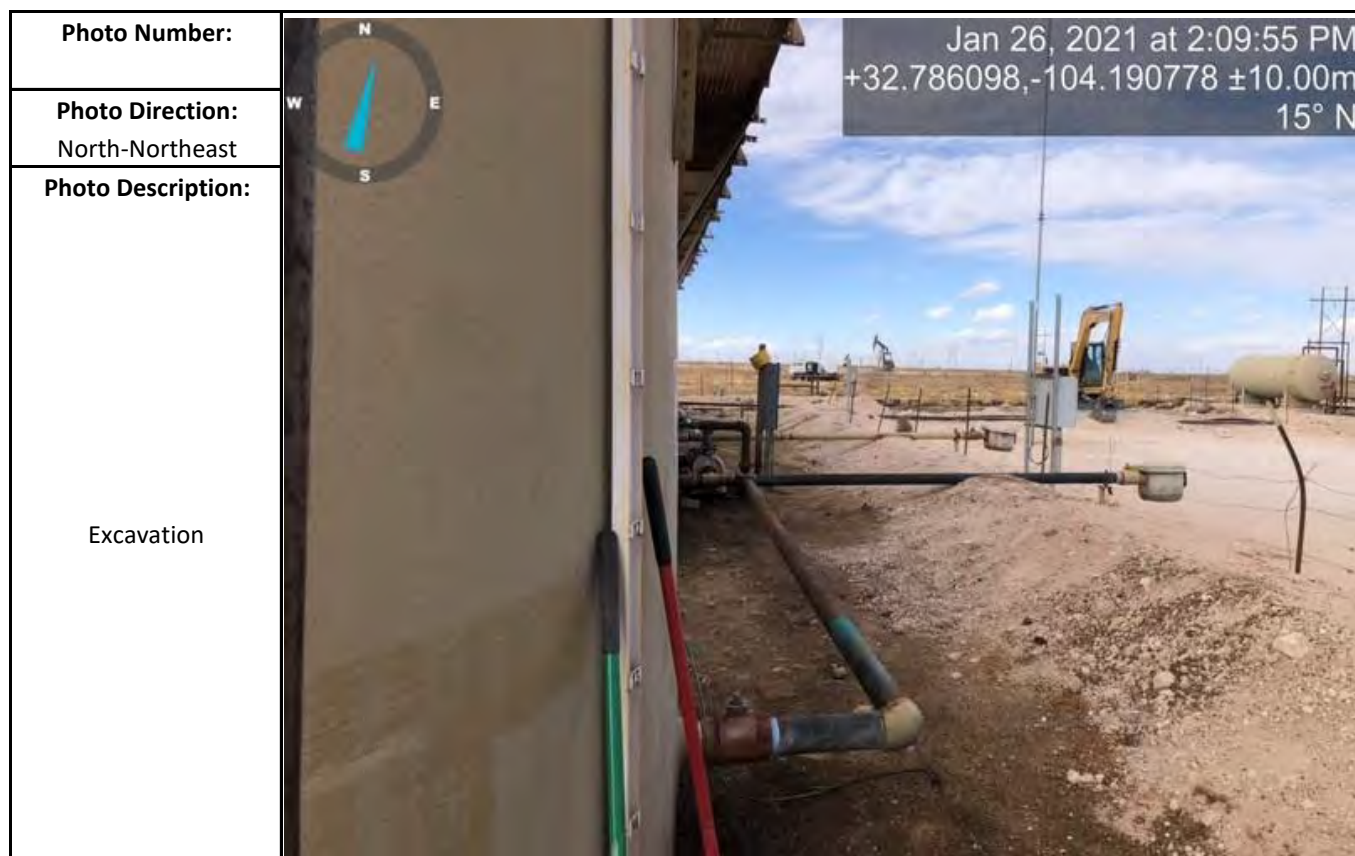
Appendix D

Photographic Log

Photographic Log



Photographic Log



Photographic Log



Photographic Log

Photo Number:	
Photo Direction: North	
Photo Description:	
Backfilled Excavation	

+32.786036,-104.190554
2/2/21, 2:46 PM

Incident ID	nRM2004550944
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: Chet Stuart Title: Manager-EHS/Operations Support
Signature: Chet Stuart Date: 4/7/21
email: cstuart@contango.com Telephone: (432)302-0538

OCD Only

Received by: Robert Hamlet Date: 7/14/2021

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

Signature: Robert Hamlet Date: 7/14/2021

District I

1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 23336

CONDITIONS

Operator: Contango Resources, Inc. 717 Texas Ave. Houston, TX 77002	OGRID: 330447
	Action Number: 23336
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	Contango Oil's deferral request to complete final remediation of soil sample locations FL1@8", FL2@8", FL3@8", SP1-D, and SP2-D during any future major deconstruction/alteration and/or abandonment, whichever occurs first is approved by the OCD at this time. The Deferral Request and C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue.	7/15/2021