

Incident ID	NRM2000635221
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Carmen E. Pitt Title: Senior HSE Specialist
 Signature: *Carmen E Pitt* Date: 9/29/2020
 email: cpitt@grizzlyenergyllc.com Telephone: 432-248-8145

OCD Only

Received by: Cristina Eads Date: 09/29/2020

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

Closure Approved by: *Cristina Eads* Date: 11/24/2020
 Printed Name: Cristina Eads Title: Environmental Specialist

Remediation Summary and Soil Closure Request

Grizzly Energy, LLC

Cole State #10

Lea County, New Mexico

Unit Letter E, Section 16, Township 22 South, Range 37 East

Latitude 32.39287 North, Longitude 103.17297 West

NMOCD Reference No. nRM2000635221

Prepared By:

Etech Environmental & Safety Solutions, Inc.

3100 Plains Highway

Lovington, New Mexico 88260



Lance Crenshaw



Joel W. Lowry



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1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Grizzly Energy, LLC, has prepared this Report for the Release Site known as the Cole State #10. Details of the release are summarized below:

Location of Release Source				
Latitude: <u>32.39287</u>		Longitude: <u>-103.17297</u>		
Provided GPS are in WGS84 format.				
Site Name: <u>Cole State #10</u>		Site Type: <u>Flowline</u>		
Date Release Discovered: <u>11/4/2019</u>		API # (if applicable): <u>30-025-22163</u>		
Unit Letter	Section	Township	Range	County
E	16	22S	37E	Lea
Surface Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Private (Name _____)				
Nature and Volume of Release				
<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls)	0.6	Volume Recovered (bbls)	0.25
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls)	22	Volume Recovered (bbls)	0.25
	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 a line plugging off, pressuring up and causing the rollergrip clamp to fail.				
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 Release Site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided as Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	~ 75 Ft.	
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 checked="" type="checkbox"/> Yes	<input 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.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

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

Closure Criteria for Soil Impacted by a Release			
Probable Depth to Groundwater	Constituent	Method	Limit
~ 75 Ft.	Chloride	EPA 300.0 or SM4500 Cl B	10000 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	2500 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	1000 mg/kg
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg

4.0 INITIAL SITE ASSESSMENT

On November 5 and 8, 2019, Etech conducted an initial release assessment at the Site. During the initial release assessment, a series of hand-augered soil bores (V1 through V5) were advanced within the release margins in an effort to determine the vertical extent of soil impacts. In addition, hand-augered soil bores and/or test trenches were advanced at the inferred edges of the affected area in an effort to determine the horizontal extent of soil impacts. During the advancement of the hand-augered soil bores, field soil samples were collected and field-screened for the presence of Volatile Organic Compounds utilizing a Photoionization Detector (PID) and/or concentrations of chloride utilizing a Hach Quantab[®] chloride test kit. A "Site & Sample Location Map" is provided as Figure 3. Field data and soil profile logs, if applicable, are provided as Appendix B.

Based on field observations and field test data, thirty-two (32) delineation soil samples (V1 @ 3.5'-R, V2 @ Surf., V3 @ Surf., V4 @ 1', V5 @ Surf., V5 @ 1.5'-R, NH1 @ Surf., NH1 @ 1', EH1 @ Surf., EH1 @ 1', EH2 @ Surf., EH2 @ 1', EH3 @ Surf., EH3 @ 1', EH4 @ Surf., EH4 @ 1', EH5 @ Surf., EH5 @ 1', SH1 @ Surf., SH1 @ 1', SH2 @ Surf., SH2 @ 1', WH1 @ Surf., WH1 @ 1', WH2 @ Surf., WH2 @ 1', WH3 @ Surf., WH3 @ 1', WH4 @ Surf., WH4 @ 1', WH5 @ Surf. and WH5 @ 1') were submitted to the laboratory for analysis of BTEX, TPH and chloride. Based on laboratory analytical results, the horizontal extent of affected soil impacted above the NMOCD Closure Criteria was adequately defined. Additional vertical delineation would be required in the areas characterized by sample points V1 through V5. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided in Appendix C.

On December 6, 2019, Etech revisited the Site. During the site visit, a series of hand-augered soil bores were advanced within the release margins in the areas characterized by sample points V3 through V5 an effort to determine the vertical extent of soil impacts. During the advancement of the hand-augered soil bores, three (3) delineation soil samples (V3 @ 4', V4 @ 3' and V5 @ 3') were collected and submitted to the laboratory for analysis of BTEX, TPH and/or chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples with the exception of soil sample V4 @ 3', which exhibited a TPH concentration of 554.4 mg/kg.

On December 23, 2019, Etech revisited the Site in an effort to further investigate impacted soil in the areas characterized by sample points V1, V2, V4 and V5. During the site visit, a series of hand-augered soil bores were advanced within the release margins in the areas characterized by sample points V1, V2, V4 and V5 in an effort to determine the vertical extent of soil impacts. During the advancement of the hand-augered soil bores, four (4) delineation soil samples (V1 @ 4', V2 @ 4', V4 @ 4' and V5 @ 4') were collected and submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples with the exception of soil samples V1 @ 4' and V4 @ 4', which exhibited TPH concentrations of 7,478 mg/kg and 8,521 mg/kg, respectively. Collection of additional samples from sample points V1 and V4 was precluded due to the presence of a resilient rock layer.

On February 19, 2020, Etech revisited the Site in an effort to further investigate impacted soil in the areas characterized by sample points V1 and V4. During the site visit, a series of test trenches were advanced within the release margins in the areas characterized by sample points V1 and V4 in an effort to determine the vertical extent of soil impacts. During the advancement of the test trenches, four (4) delineation soil samples (V1 @ 5', V1 @ 6', V4 @ 8' and V4 @ 9') were collected and submitted to the laboratory for analysis of TPH. Laboratory analytical results indicated TPH concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples.

Based on laboratory analytical results, the horizontal extent of affected soil impacted above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was adequately defined and soil was not affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard beyond 5 Ft. bgs in the area characterized by sample point V1, 4 Ft. bgs in the areas characterized by sample points V2, V3 and V5, and 8 Ft. bgs in the area characterized by sample point V4. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided in Appendix C.

5.0 PROPOSED REMEDIATION PLAN

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

- Utilizing mechanical equipment, excavate impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard in the area characterized by sample point V1 to an estimated depth of 5 Ft. bgs, the areas characterized by sample points V2, V3 and V5 to an estimated depth of 4 Ft. bgs, and the area characterized by sample point V4 to an estimated depth of 8 Ft bgs..
- The floor and sidewalls of the excavated area will be advanced until laboratory analytical results indicated impacted soil affected above the NMOCD Closure Criteria has been removed.
- Excavated material will be temporarily stockpiled on-site, then transported to an NMOCD-approved disposal facility.
- Upon excavating impacted soil affected above the NMOCD Closure Criteria and/or the NMOCD Reclamation Standard, collect the requisite excavation confirmation soil samples.
- Upon receiving laboratory analytical results from excavation confirmation soil samples, backfill the excavated area with locally sourced, non-impacted "like" material.
- Excavation backfill will be contoured to match the surrounding topography.
- Upon completion of remediation activities, prepare a Remediation Summary and Site Closure Request detailing remediation activities and the results of confirmation soil samples.

6.0 REGULATORY APPROVALS AND STIPULATIONS

On March 6th, 2020, a Site Assessment Report and Proposed Remediation Workplan was submitted to the NMOCD proposing remediation activities designed to advance the Site toward regulatory closure. The Site Assessment Report and Proposed Remediation Workplan was subsequently approved.

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

7.0 REMEDIATION ACTIVITIES SUMMARY

On August 24, 2020, remediation activities commenced at the Site. In accordance with the approved workplan, impacted soil affected above the NMOCD Closure Criteria was excavated and stockpiled on-site, pending final disposition at an NMOCD-approved surface waste facility for disposal. The floor and sidewalls of the excavation were advanced until field observations and test results suggesting BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

On August 24, 2020, Etech collected six (6) excavation confirmation soil samples (NWW1, NEW1, SWW1, FL1 @ 4', FL2 @ 4', and FL3 @ 4'). The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and/or chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples with the exceptions of SWW1 and FL3 @ 4', which exhibited GRO+DRO concentrations of 1,260 mg/kg and 1,810 mg/kg, respectively.

On August 25, 2020, Etech collected nine (9) excavation confirmation soil samples (FL4 @4', FL5@4', FL6 @4', SWW #2, NEW #2, FL7 @ 4', FL8 @ 4', FL9 @ 4', and FL10 @ 4'). The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and/or chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples with the exception of FL4 @ 4', which exhibited a GRO+DRO concentration of 1,040 mg/kg.

On August 26, 2020, Etech collected eight (8) excavation confirmation soil samples (FL11 @ 4', FL12 @ 4', FL13 @4', FL14 @4', FL15 @4', SWW3, NEW3, and SEW1). The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and/or chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples with the exceptions of FL11 @ 4', FL12 @ 4', and FL15 @ 4', which exhibited GRO+DRO concentrations of 1,250 mg/kg, 1,980 mg/kg, and 1,130 mg/kg, respectively.

On September 9, 2020, excavation activities resumed at the Site. Impacted soil in the areas characterized by sample points NWW1, SWW1, FL3 @ 4', FL4 @ 4', FL11 @ 4', FL12 @ 4', and FL15 @ 4' was excavated and transported to an NMOCD-approved surface waste facility for disposal. Upon excavating impacted soil remaining in-situ, Etech collected seven (7) additional excavation confirmation soil samples (NWW1B, SWW1B, FL3 @5', FL4 @5', FL11 @5', FL12 @5', and FL15 @5') and submitted them to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

On September 10, 2020, Etech collected seven (7) excavation confirmation soil samples (FL 16 @ 5', FL 17 @ 5', FL 18 @ 5', FL 19 @ 5', FL 20 @ 5', SWW 4, and NEW 4). The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and/or chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

A "Site & Sample Location Map" is provided as Figure 3. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided as Appendix C.

The final dimensions of the excavated area were 240 Ft. in length, 5 to 100 Ft. in width and ranged from 4 to 5 Ft. in depth. During the course of remediation activities approximately 640 cubic yards of impacted soil were transported to an NMOCD-approved surface waste facility for disposal.

8.0 RESTORATION, RECLAMATION AND RE-VEGETATION PLAN

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

9.0 SOIL CLOSURE 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 and transported to an NMOCD-approved disposal facility. Laboratory analytical results from confirmation soil samples indicate concentrations of BTEX, TPH and chloride are below the NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

Based on laboratory analytical results and field activities conducted to date, Etech recommends Grizzly Energy, LLC provide copies of this Remediation Summary and Soil Closure Request to the appropriate agencies and request closure be granted to the Cole State #10 Site.

10.0 LIMITATIONS

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

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

11.0 DISTRIBUTION

Grizzly Energy, LLC

4001 Penbrook
Suite 201
Odessa, TX 79762

New Mexico Energy, Minerals and Natural Resources Department

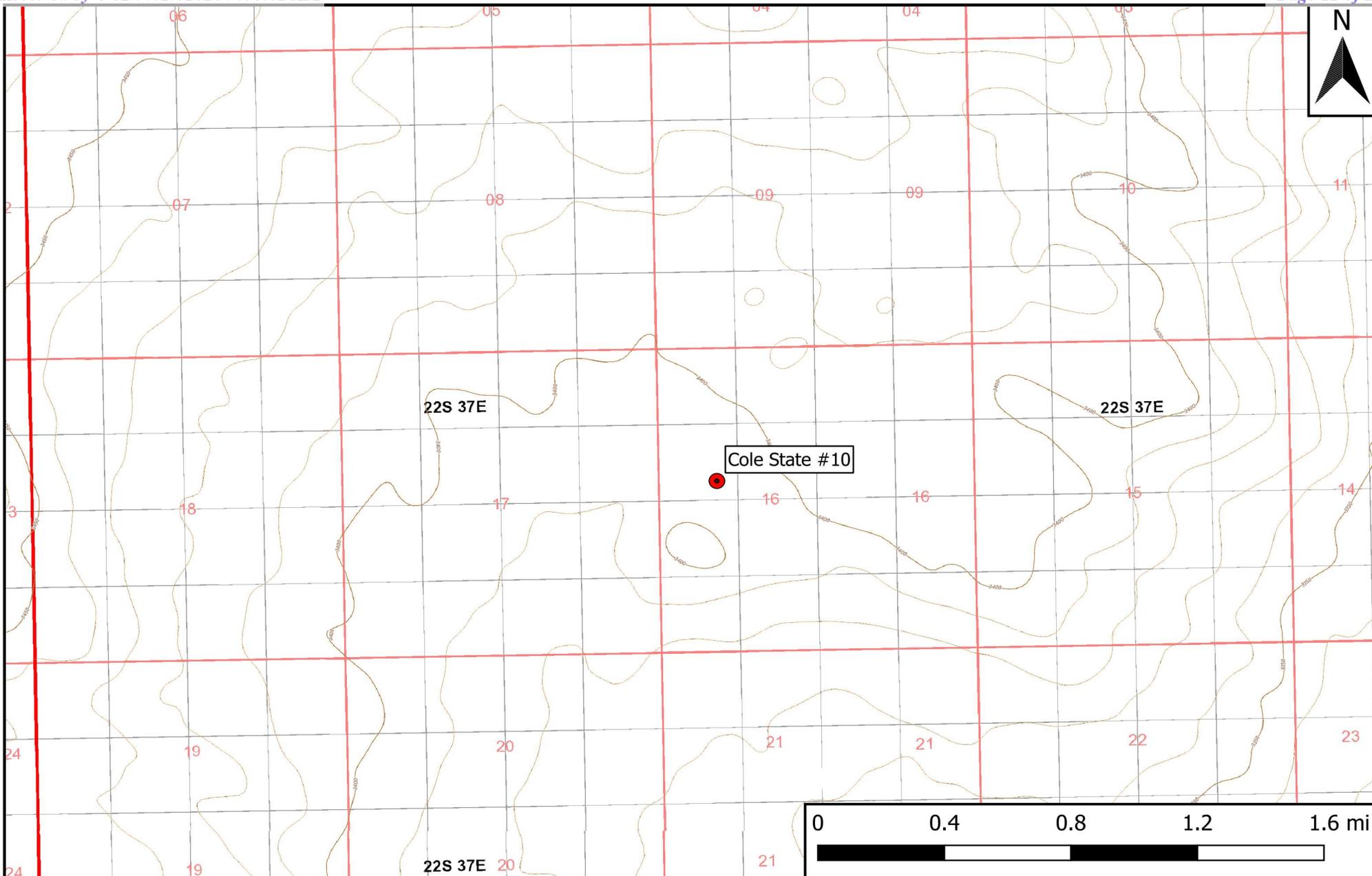
Oil Conservation Division, District 1
1220 South St. Francis Drive
Santa Fe, NM 87505

Hobbs Field Office

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

(Electronic Submission)

Figure 1 Topographic Map



Legend

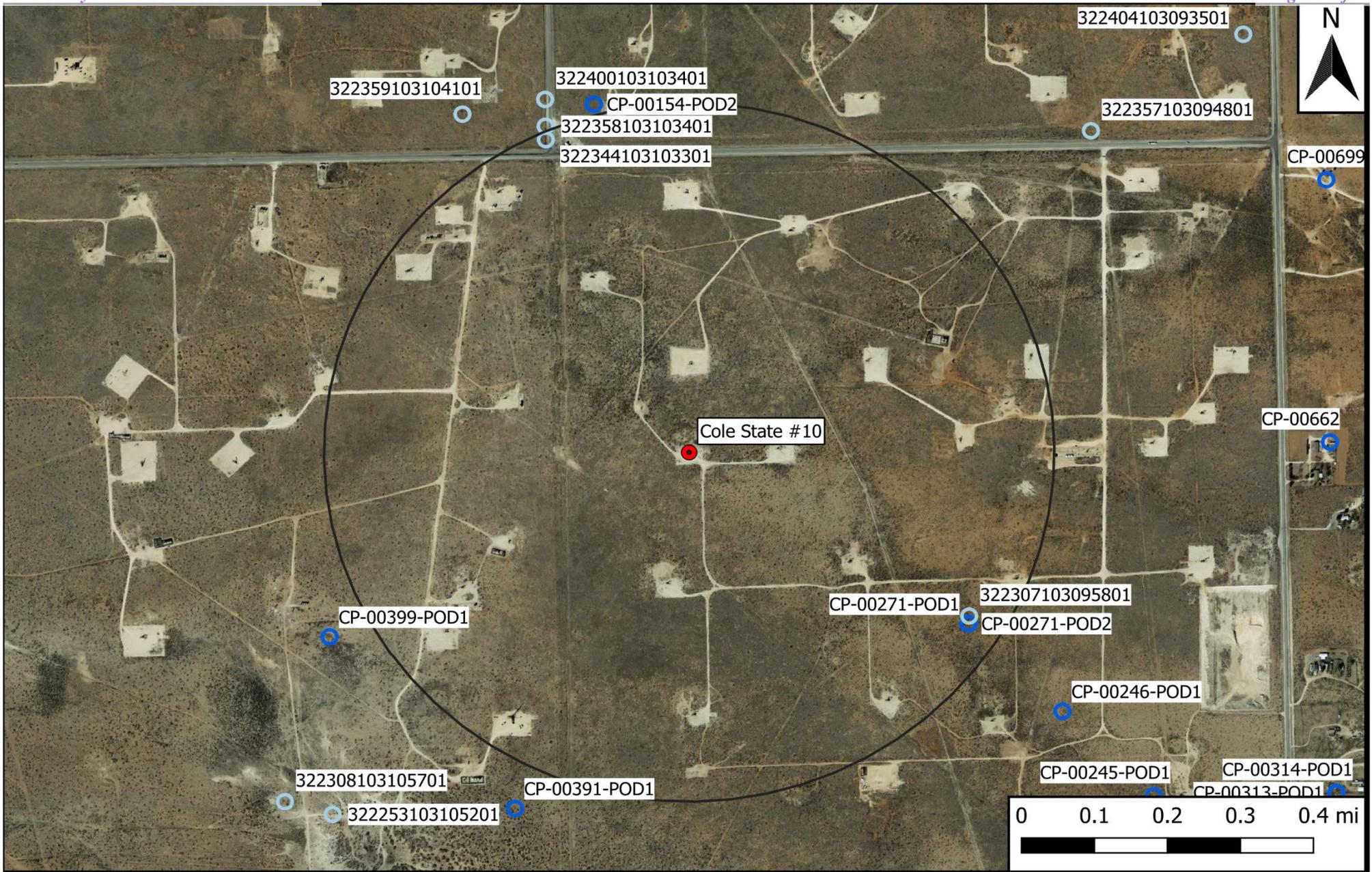
- Site Location

Figure 1
 Topographic Map
 Grizzly Energy, LLC
 Cole State #10
 GPS: 32.39277, -103.17335
 Lea County

Drafted: mag Checked: jwl Date: 11/6/19

Figure 2

Aerial Proximity Map



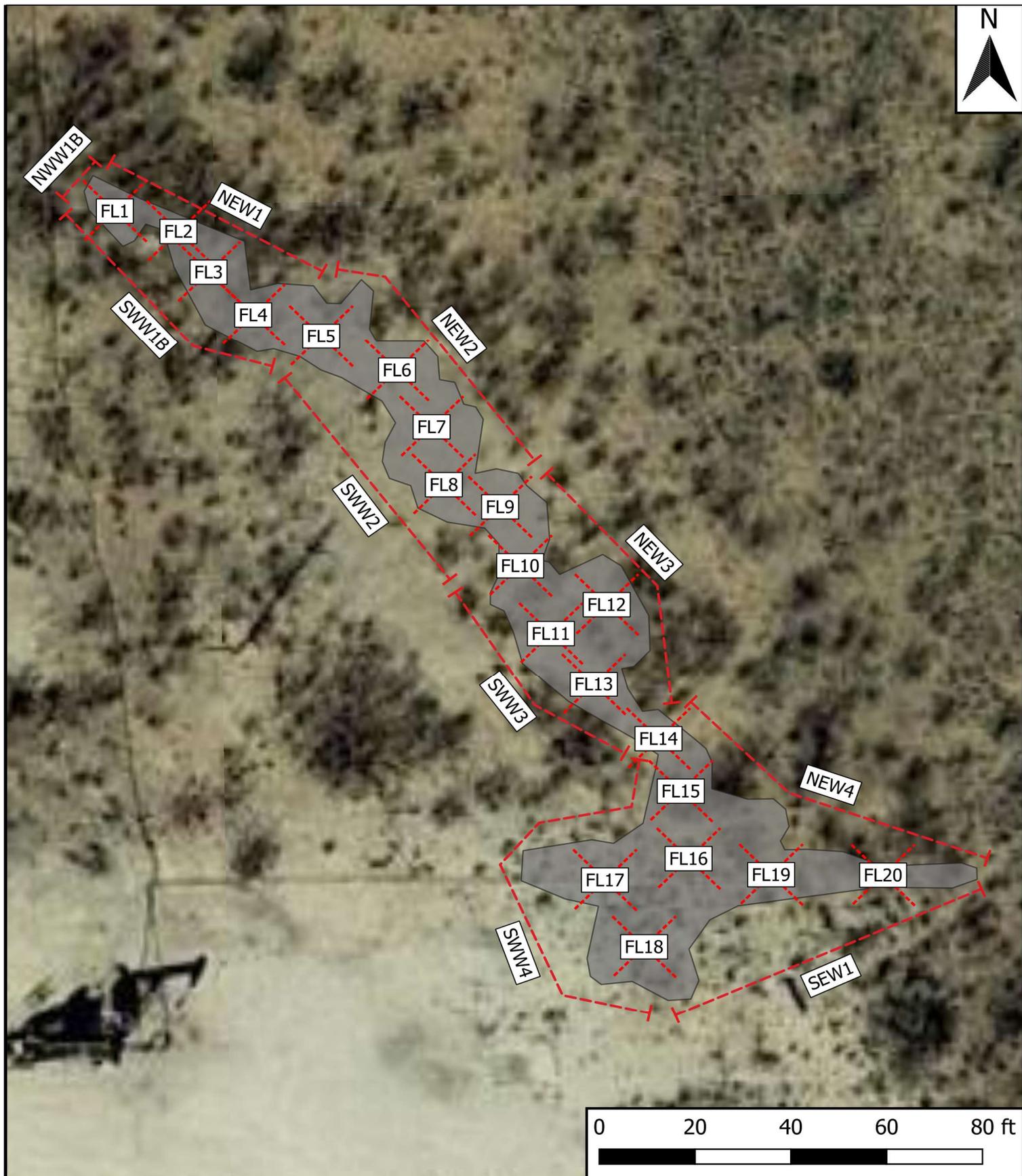
Legend	
	Site Location
	Potash Mine Workings
	0.5 Mi Radius
	1% Annual Flood Chance
	Surface Water
	Well - USGS
	Well - NMOSE
	High Karst
	Medium Karst

Figure 2
 Aerial Map
 Grizzly Energy, LLC
 Cole State #10
 GPS: 32.39277, -103.17335
 Lea County

eTECH
 Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 11/6/19

Figure 3
Site and Sample Location Map



Legend

- Floor Sample
- Wall Sample
- Excavation

Figure 3

Site and Sample Location Map
 Grizzly Energy, LLC
 Cole State #10
 GPS: 32.39287, -103.17297
 Lea County



Drafted: mag
 Checked: jwl
 Date: 9/23/20

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

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL
Grizzly Energy, LLC
Cole State #10
NMOCD Ref. #: nRM2000635221

NMOCD Closure Criteria				10	50	-	-	1000	-	2500	10000	
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600	
Sample ID	Date	Depth	Soil Status	SW 846 8021B				SW 846 8015M Ext.				4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)	
V 2 @ SURFACE	11/5/2019	Surf	Excavated	1.99	187	1,870	4,980	6,850	434	7,280	1,600	
V 3 @ SURFACE	11/5/2019	Surf	Excavated	5.49	445	11,200	45,000	56,200	6,930	63,100	1,200	
V 4 @ 1'	11/5/2019	1'	Excavated	0.349	89.7	846	2,880	3,730	213	3,940	464	
V 5 @ SURFACE	11/5/2019	Surf	Excavated	5.15	767	15,400	54,200	69,600	8,010	77,600	<16.0	
SH 1 @ SURFACE	11/5/2019	Surf	In-Situ	<0.050	0.543	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
SH 1 @ 1'	11/5/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0	
SH 2 @ SURFACE	11/5/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0	
SH 2 @ 1'	11/5/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0	
EH 1 @ SURFACE	11/5/2019	Surf	In-Situ	<0.200	<1.20	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
EH 1 @ 1'	11/5/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
WH 1 @ SURFACE	11/5/2019	Surf	In-Situ	<0.050	<0.300	<10.0	19.7	19.7	<10.0	19.7	<16.0	
WH 1 @ 1'	11/5/2019	1'	In-Situ	<0.050	<0.300	<10.0	10.5	10.5	<10.0	10.5	<16.0	
V 1 @ 3.5' -R	11/8/2019	3.5'	In-Situ	<0.050	3.08	51.5	612	664	55.2	719	1,010	
V 5 @ 1.5' - R	11/8/2019	1.5'	In-Situ	<0.050	0.319	<10.0	190	190	<10.0	190	32.0	
WH 2 @ SURFACE	11/8/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
WH 2 @ 1'	11/8/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	496	
WH 3 @ SURFACE	11/8/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
WH 3 @ 1'	11/8/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	272	
WH 4 @ SURFACE	11/8/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
WH 4 @ 1'	11/8/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0	
WH 5 @ SURFACE	11/8/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
WH 5 @ 1'	11/8/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
EH 2 @ SURFACE	11/8/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
EH 2 @ 1'	11/8/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
EH 3 @ SURFACE	11/8/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0	
EH 3 @ 1'	11/8/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	240	
EH 4 @ SURFACE	11/8/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0	
EH 4 @ 1'	11/8/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
EH 5 @ SURFACE	11/8/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
EH 5 @ 1'	11/8/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0	
NH 1 @ SURFACE	11/8/2019	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
NH 1 @ 1'	11/8/2019	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0	
V 3 @ 4'	12/6/2019	4'	In-Situ	<0.050	0.917	35.1	758	793	106	899	1,150	
V 4 @ 3'	12/6/2019	3'	In-Situ	<0.050	<0.300	<10.0	468	468	86.4	554	64.0	
V5 @ 3'	12/6/2020	3'	Excavated	-	-	-	-	-	-	-	96.0	
V 1 @ 4'	12/23/2019	4'	Excavated	<0.050	1.00	37.9	5,990	6,030	1,450	7,480	528	
V 2 @ 4'	12/23/2019	4'	In-Situ	<0.050	<0.300	11.7	697	709	173	882	896	
V 4 @ 4'	12/23/2019	4'	Excavated	<0.100	0.974	50.7	6,970	7,020	1,500	8,520	80.0	
V 5 @ 4'	12/23/2019	4'	In-Situ	<0.050	<0.300	<10.0	654	654	156	810	64.0	
V 1 @ 5'	2/19/2020	5'	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	-	
V 1 @ 6'	2/19/2020	6'	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	-	

NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL
Grizzly Energy, LLC
Cole State #10
NMOCD Ref. #: nRM2000635221

NMOCD Closure Criteria				10	50	-	-	1000	-	2500	10000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
V 4 @ 8'	2/19/2020	8'	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	-
V 4 @ 9'	2/19/2020	9'	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	-
NWW1	8/24/2020	N/A	Excavated	<0.00199	<0.00199	<50.0	420	420	<50.0	420	9.90
NEW1	8/24/2020	N/A	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	11.7
SWW1	8/24/2020	N/A	Excavated	<0.00200	<0.00200	<49.9	1,260	1,260	117	1,380	63.4
FL1 @ 4'	8/24/2020	4'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	490
FL2 @ 4'	8/24/2020	4'	In-Situ	<0.00199	<0.00199	<49.9	228	228	<49.9	228	218
FL3 @ 4'	8/24/2020	4'	Excavated	<0.00201	0.215	226	1,580	1,810	120	1,930	441
FL4 @4'	8/25/2020	4'	Excavated	<0.00200	<0.00200	<49.9	1,040	1,040	104	1,140	93.6
FL5@4'	8/25/2020	4'	In-Situ	<0.00198	<0.00198	<49.8	621	621	59.0	680	1,090
FL6 @4'	8/25/2020	4'	In-Situ	<0.00199	<0.00199	<50.0	483	483	<50.0	483	1,420
SWW #2	8/25/2020	N/A	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	9.19
NEW #2	8/25/2020	N/A	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	72.5
FL7 @ 4'	8/25/2020	4'	In-Situ	<0.00200	<0.00200	<49.9	156	156	<49.9	156	864
FL8 @ 4'	8/25/2020	4'	In-Situ	<0.00199	<0.00199	<50.0	137	137	<50.0	137	1,990
FL9 @ 4'	8/25/2020	4'	In-Situ	<0.00198	<0.00198	<49.8	71.9	71.9	<49.8	71.9	628
FL10 @ 4'	8/25/2020	4'	In-Situ	<0.00200	<0.00200	<50.0	958	958	89.1	1,050	1,690
FL11 @ 4'	8/26/2020	4'	Excavated	<0.00199	<0.00199	<49.9	1,250	1,250	94.1	1,340	1,630
FL12 @ 4'	8/26/2020	4'	Excavated	<0.00200	<0.00200	<50.0	1,980	1,980	119	2,100	1,720
FL13 @4'	8/26/2020	4'	In-Situ	<0.00198	<0.00198	<49.9	141	141	<49.9	141	1,370
FL14 @4'	8/26/2020	4'	In-Situ	<0.00198	<0.00198	<49.9	300	300	<49.9	300	1,310
FL15 @4'	8/26/2020	4'	Excavated	<0.00199	0.161	69.5	1,060	1,130	78.2	1,210	1,190
SWW3	8/26/2020	N/A	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	11.3
NEW3	8/26/2020	N/A	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	262
SEW1	8/26/2020	N/A	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	9.78
NWW1B	9/9/2020	N/A	In-Situ	-	-	<49.9	<49.9	<49.9	<49.9	<49.9	-
SWW1B	9/9/2020	N/A	In-Situ	-	-	<49.8	<49.8	<49.8	<49.8	<49.8	-
FL3 @5'	9/9/2020	5'	In-Situ	-	-	<50.2	<50.2	<50.2	<50.2	<50.2	-
FL4 @5'	9/9/2020	5'	In-Situ	-	-	<49.8	<49.8	<49.8	<49.8	<49.8	-
FL11 @5'	9/9/2020	5'	In-Situ	-	-	<49.9	<49.9	<49.9	<49.9	<49.9	-
FL12 @5'	9/9/2020	5'	In-Situ	-	-	<50.2	<50.2	<50.2	<50.2	<50.2	-
FL15 @5'	9/9/2020	5'	In-Situ	-	-	<50.0	<50.0	<50.0	<50.0	<50.0	-
FL 16 @ 5'	9/10/2020	5'	In-Situ	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	241
FL 17 @ 5'	9/10/2020	5'	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	255
FL 18 @ 5'	9/10/2020	5'	In-Situ	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	245
FL 19 @ 5'	9/10/2020	5'	In-Situ	<0.00201	<0.00201	<50.3	<50.3	<50.3	<50.3	<50.3	254
FL 20 @ 5'	9/10/2020	5'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	137
SWW 4	9/10/2020	N/A	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	97.8

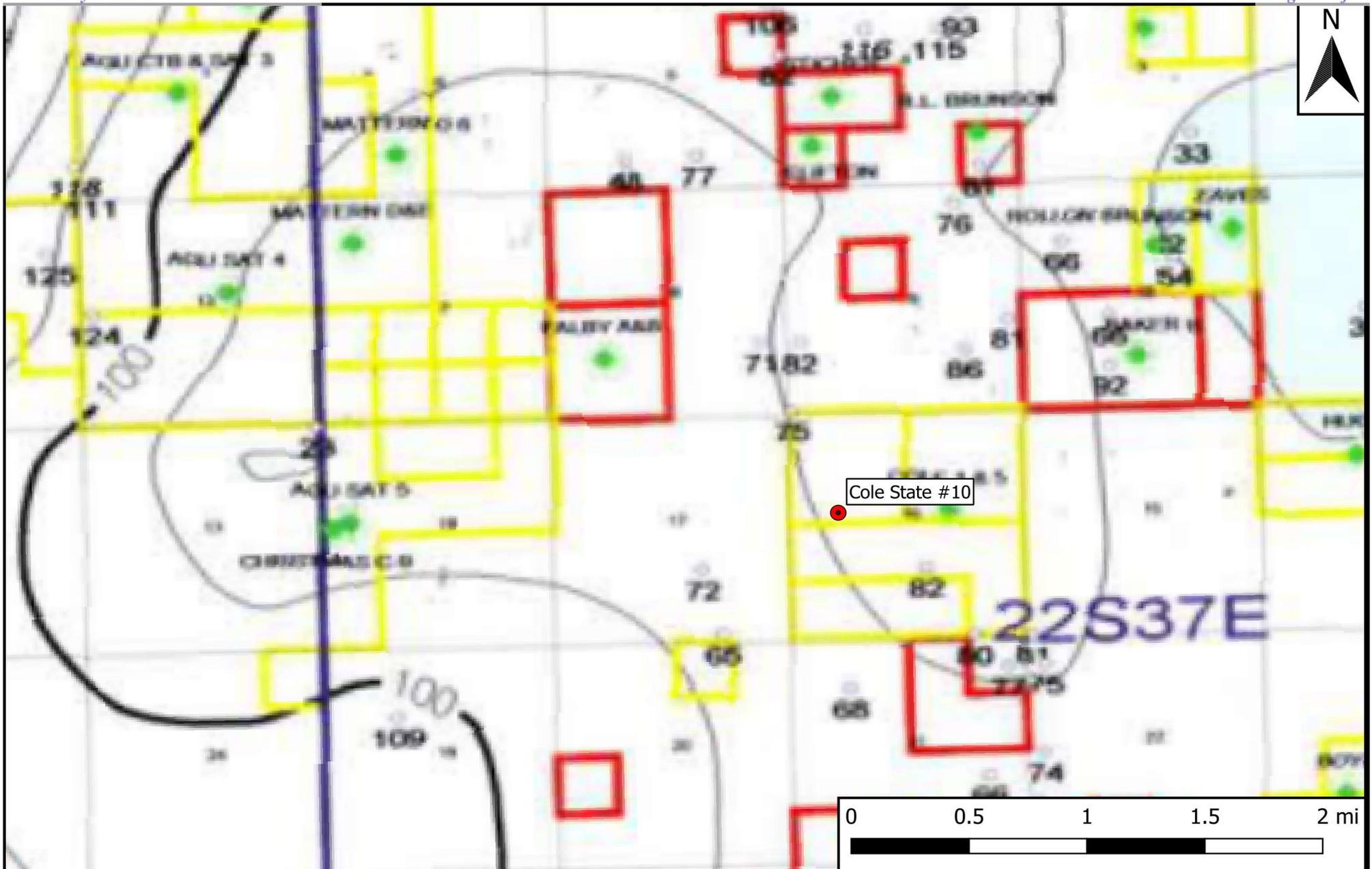
NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

Appendix A

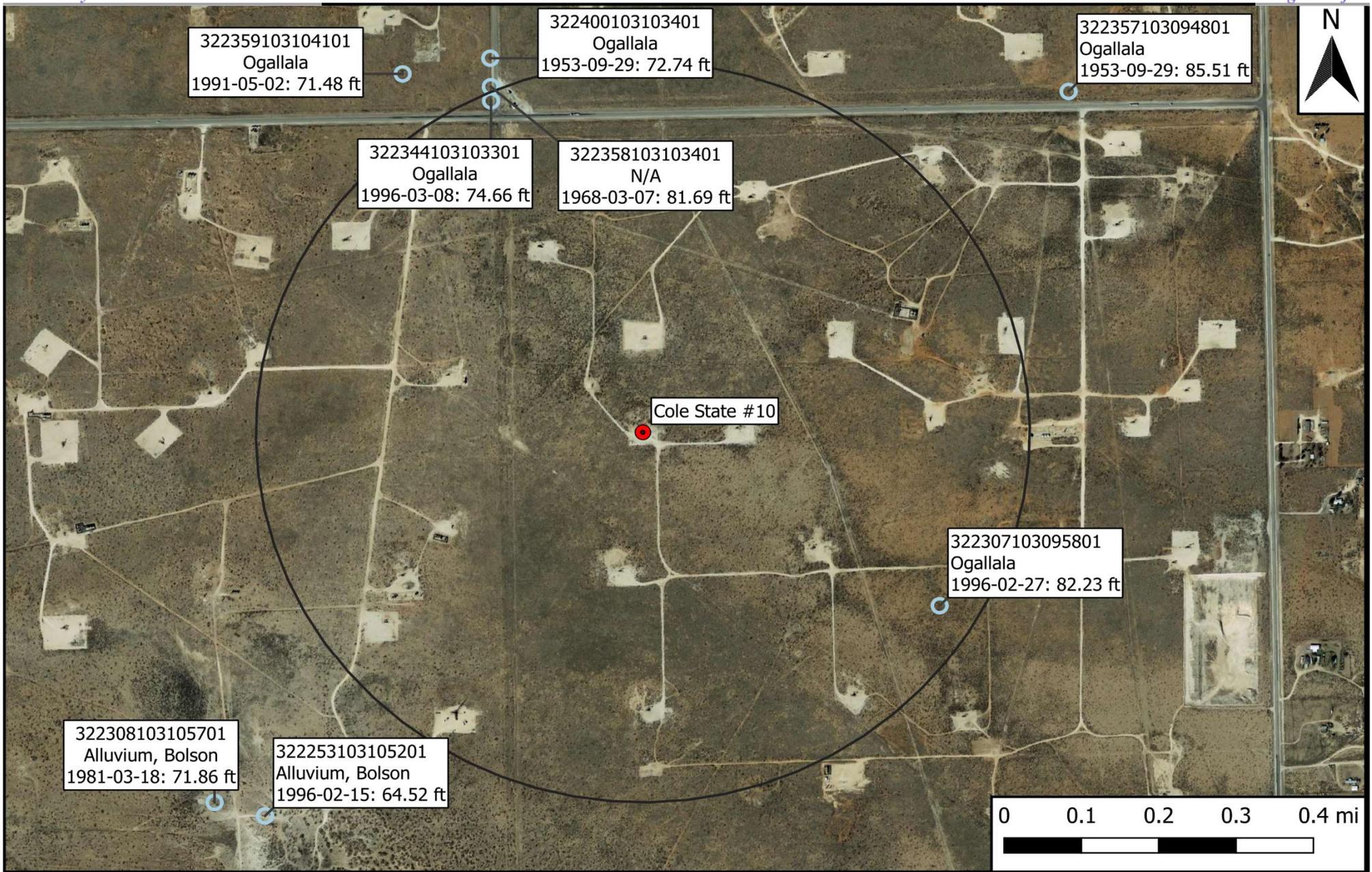
Depth to Groundwater Information



Legend
 ● Site Location

Figure 4
 Inferred Depth to Groundwater Trend Map
 Grizzly Energy, LLC
 Cole State #10
 GPS: 32.39277, -103.17335
 Lea County





Legend
 ● Site Location
 ○ Well - USGS

Figure 5
 USGS Well Proximity Map
 Grizzly Energy, LLC
 Cole State #10
 GPS: 32.39277, -103.17335
 Lea County

eTECH
 Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 11/6/19



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 671809.79 **Northing (Y):** 3585440.13 **Radius:** 804.67

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WATER COLUMN/ AVERAGE
DEPTH TO WATER



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
CP 00154 POD2	CP	LE	3 3 3	09	22S	37E				671600	3586239*	825	172		
CP 00391 POD1	CP	LE	4 4 4	17	22S	37E				671426	3584623*	902	96		
CP 00246 POD1	CP	LE	2 3 4	16	22S	37E				672633	3584845*	1015	135		
CP 00871	CP	LE		3	09	22S	37E			671902	3586541*	1104	167	94	73
CP 01353 POD1	CP	LE	3 1 3	09	22S	37E				671514	3586640	1236	93	73	20
CP 00245 POD1	CP	LE	3 4 4	16	22S	37E				672835	3584652*	1293	136		
CP 00662	CP	LE	3 3 1	15	22S	37E				673223	3585464*	1413	180	150	30
CP 00699	CP	LE	1 1 1	15	22S	37E				673215	3586066*	1538	163	100	63
CP 00709	CP	LE		1	3	15	22S	37E		673331	3585163*	1546	200	87	113
CP 01806 POD1	CP	LE	1 3 3	15	22S	37E				673260	3584788	1590	162	95	67
CP 00674	CP	LE		1	1	15	22S	37E		673316	3585967*	1595	100	75	25
CP 00684	CP	LE		1	1	15	22S	37E		673316	3585967*	1595	200	180	20

Average Depth to Water: **106 feet**
 Minimum Depth: **73 feet**
 Maximum Depth: **180 feet**

Record Count: 12

UTMNAD83 Radius Search (in meters):

Easting (X): 671809.79 **Northing (Y):** 3585440.13 **Radius:** 1610

*UTM location was derived from PLSS - see Help

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New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 00245 POD1	3	4	4	16	22S	37E	672835	3584652*

Driller License:		Driller Company:		
Driller Name:				
Drill Start Date:	Drill Finish Date:	02/17/1947	Plug Date:	
Log File Date:	PCW Rcv Date:		Source:	
Pump Type:	Pipe Discharge Size:		Estimated Yield: 40 GPM	
Casing Size: 8.63	Depth Well:	136 feet	Depth Water:	

*UTM location was derived from PLSS - see Help

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP	00246 POD1	2	3	4	16	22S	37E	672633	3584845*

Driller License:		Driller Company:		
Driller Name:				
Drill Start Date:	Drill Finish Date:	05/17/1949	Plug Date:	
Log File Date:	PCW Rcv Date:		Source:	
Pump Type:	Pipe Discharge Size:		Estimated Yield: 33 GPM	
Casing Size: 7.00	Depth Well:	135 feet	Depth Water:	

*UTM location was derived from PLSS - see Help

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 00391 POD1	4	4	4	17	22S	37E	671426	3584623*

Driller License: 122	Driller Company: UNKNOWN	
Driller Name:		
Drill Start Date:	Drill Finish Date:	Plug Date:
Log File Date:	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 10 GPM
Casing Size: 8.00	Depth Well: 96 feet	Depth Water:

*UTM location was derived from PLSS - see Help

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Q64	Q16	Q4	Sec	Tws	Rng	X	Y
3	3	1	15	22S	37E	673223	3585464*

Well Tag **POD Number**
 CP 00662

Driller License: 764	Driller Company: B & A WATER WELL SERVICE		
Driller Name: SELMAN, AL			
Drill Start Date: 07/16/1983	Drill Finish Date: 07/20/1983	Plug Date:	
Log File Date: 08/09/1983	PCW Rcv Date:	Source: Shallow	
Pump Type:	Pipe Discharge Size:	Estimated Yield:	
Casing Size: 6.00	Depth Well: 180 feet	Depth Water: 150 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	160	170	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	160	180

*UTM location was derived from PLSS - see Help

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP 00674		1	1	15	22S	37E	673316	3585967*	

Driller License: 208		Driller Company: VAN NOY, W.L.	
Driller Name: VAN NOY, W.L.			
Drill Start Date: 03/19/1985	Drill Finish Date: 03/27/1985	Plug Date:	
Log File Date: 04/08/1985	PCW Rcv Date:	Source: Shallow	
Pump Type:	Pipe Discharge Size:	Estimated Yield: 3 GPM	
Casing Size: 7.00	Depth Well: 100 feet	Depth Water: 75 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	75	100	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	85	100

*UTM location was derived from PLSS - see Help

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP 00684		1	1	15	22S	37E	673316	3585967*	

Driller License: 208	Driller Company: VAN NOY, W.L.		
Driller Name: VAN NOY, W.L.			
Drill Start Date: 07/24/1985	Drill Finish Date: 08/01/1985	Plug Date:	
Log File Date: 08/14/1985	PCW Rcv Date:	Source: Shallow	
Pump Type:	Pipe Discharge Size:	Estimated Yield:	
Casing Size: 5.00	Depth Well: 200 feet	Depth Water: 180 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	175	180	Sandstone/Gravel/Conglomerate
	180	200	Other/Unknown

Casing Perforations:	Top	Bottom
	180	200

*UTM location was derived from PLSS - see Help

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New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP 00699		1	1	1	15	22S	37E	673215	3586066*

Driller License: 982	Driller Company: EADES, GENE		
Driller Name: EADES, GENE			
Drill Start Date: 06/02/1986	Drill Finish Date: 06/02/1986	Plug Date:	
Log File Date: 07/11/1986	PCW Rcv Date:	Source: Shallow	
Pump Type:	Pipe Discharge Size:	Estimated Yield: 6 GPM	
Casing Size: 5.75	Depth Well: 163 feet	Depth Water: 100 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	100	163	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	123	163

*UTM location was derived from PLSS - see Help

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP 00709		1	3	15	22S	37E		673331	3585163*

Driller License: 657		Driller Company: OLDAKER & SONS	
Driller Name: OLDAKER, GEORGE D.(DECEASED)			
Drill Start Date: 04/28/1987	Drill Finish Date: 04/29/1987	Plug Date:	
Log File Date: 08/31/1988	PCW Rcv Date:	Source: Shallow	
Pump Type:	Pipe Discharge Size:	Estimated Yield: 25 GPM	
Casing Size: 6.00	Depth Well: 200 feet	Depth Water: 87 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	60	87	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	117	147

*UTM location was derived from PLSS - see Help

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POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP 00871		3	09	22S	37E	671902	3586541*		

Driller License: 1044	Driller Company: EADES WELL DRILLING & PUMP SERVICE		
Driller Name: EADES, ALAN			
Drill Start Date: 09/29/1997	Drill Finish Date: 09/29/1997	Plug Date:	
Log File Date: 11/04/1997	PCW Rcv Date:	Source: Shallow	
Pump Type:	Pipe Discharge Size:	Estimated Yield:	
Casing Size: 5.75	Depth Well: 167 feet	Depth Water: 94 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	124	145	Sandstone/Gravel/Conglomerate
	145	164	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	147	167

*UTM location was derived from PLSS - see Help

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New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP 01353	POD1	3	1	3	09	22S	37E	671514	3586640

Driller License: 1292	Driller Company: BENTLE WATER WELL SERVICE		
Driller Name: BENTLE, BILLY L.			
Drill Start Date: 05/04/2015	Drill Finish Date: 05/18/2015	Plug Date:	
Log File Date: 05/28/2015	PCW Rcv Date:	Source: Shallow	
Pump Type:	Pipe Discharge Size:	Estimated Yield: 9 GPM	
Casing Size: 6.00	Depth Well: 93 feet	Depth Water: 73 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	83	93	Other/Unknown

Casing Perforations:	Top	Bottom
	73	93

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.

11/6/19 12:00 PM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
2247E	CP 01806 POD1	1	3	3	15	22S	37E	673260	3584788

Driller License: 1477	Driller Company: M & W WATERWELL SERVICE		
Driller Name: ROBERT MAUCK			
Drill Start Date: 10/20/2019	Drill Finish Date: 10/21/2019	Plug Date:	
Log File Date: 10/28/2019	PCW Rcv Date:	Source: Shallow	
Pump Type:	Pipe Discharge Size:	Estimated Yield: 10 GPM	
Casing Size:	Depth Well: 162 feet	Depth Water: 95 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	107	162	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	142	162

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11/6/19 12:00 PM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
CP 00154	POD2	3	3	3	09	22S	37E	671600	3586239*

Driller License:		Driller Company:		
Driller Name: ED BURKE				
Drill Start Date: 01/31/1946	Drill Finish Date: 01/31/1946	Plug Date:		
Log File Date:	PCW Rcv Date: 03/12/1992	Source: Shallow		
Pump Type:	Pipe Discharge Size:	Estimated Yield: 34 GPM		
Casing Size:	Depth Well: 172 feet	Depth Water:		

*UTM location was derived from PLSS - see Help

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11/6/19 12:00 PM

POINT OF DIVERSION SUMMARY



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

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 =

- 322253103105201

Minimum number of levels = 1

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

USGS 322253103105201 22S.37E.17.434414

Available data for this site

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°23'07", Longitude 103°10'53" NAD27

Land-surface elevation 3,374.30 feet above NGVD29

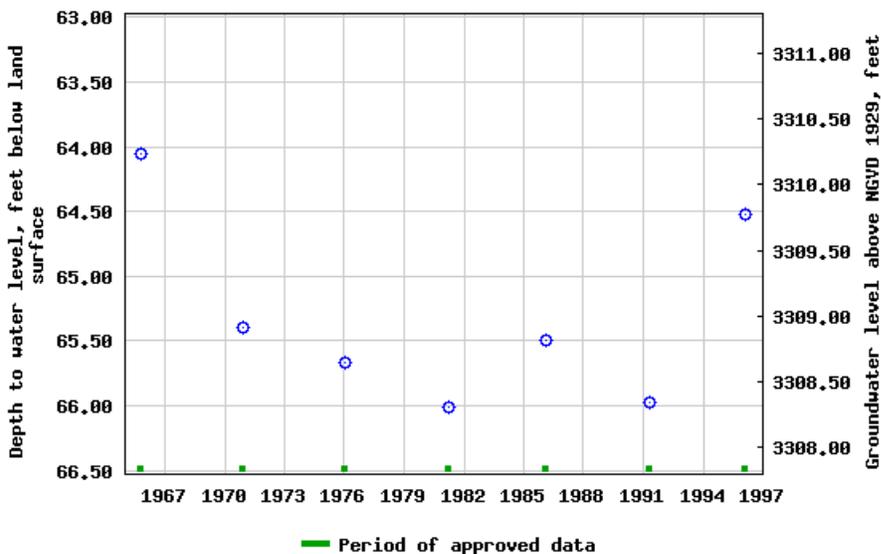
The depth of the well is 96 feet below land surface.

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

USGS 322253103105201 22S.37E.17.434414



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

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2019-11-06 13:23:58 EST

0.61 0.45 nadww01



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USGS Water Resources

Data Category: Geographic Area:

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 322307103095801

Minimum number of levels = 1

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

USGS 322307103095801 22S.37E.16.413412

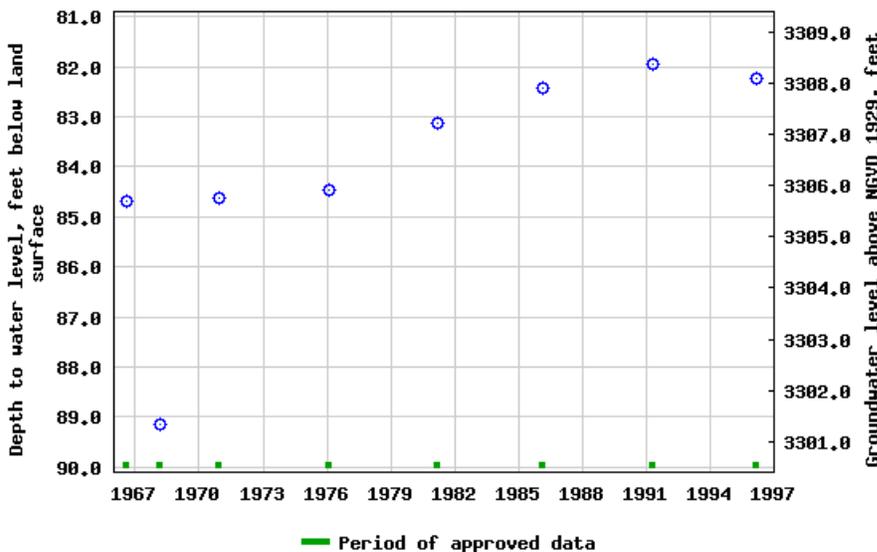
Available data for this site

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°23'21", Longitude 103°09'59" NAD27
 Land-surface elevation 3,390.40 feet above NGVD29
 The depth of the well is 140 feet below land surface.
 This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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

USGS 322307103095801 22S.37E.16.413412



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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



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0.52 0.44 nadww01



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USGS Water Resources

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 322308103105701

Minimum number of levels = 1

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

USGS 322308103105701 22S.37E.17.414133

Available data for this site

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°23'08", Longitude 103°10'57" NAD27

Land-surface elevation 3,382 feet above NAVD88

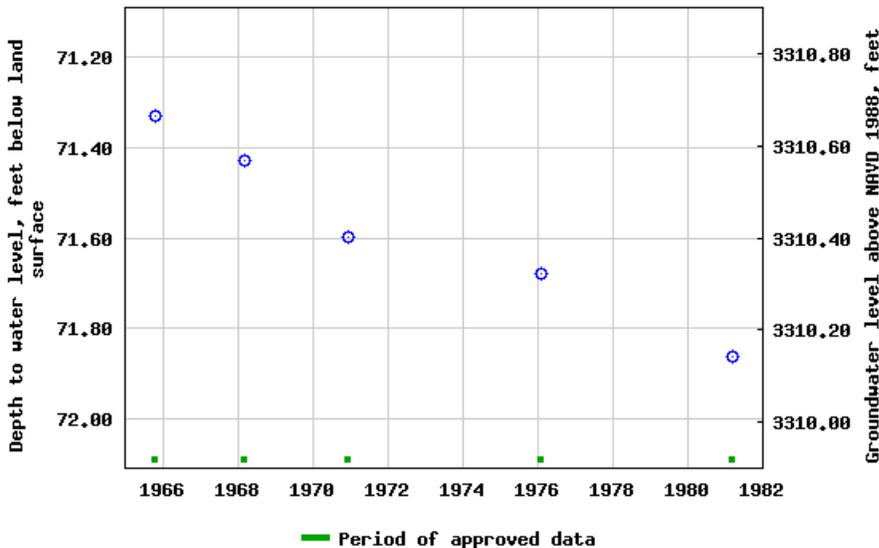
The depth of the well is 110 feet below land surface.

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

USGS 322308103105701 22S.37E.17.414133



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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2019-11-06 13:23:59 EST

0.54 0.46 nadww01



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USGS Water Resources

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 322344103103301

Minimum number of levels = 1

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

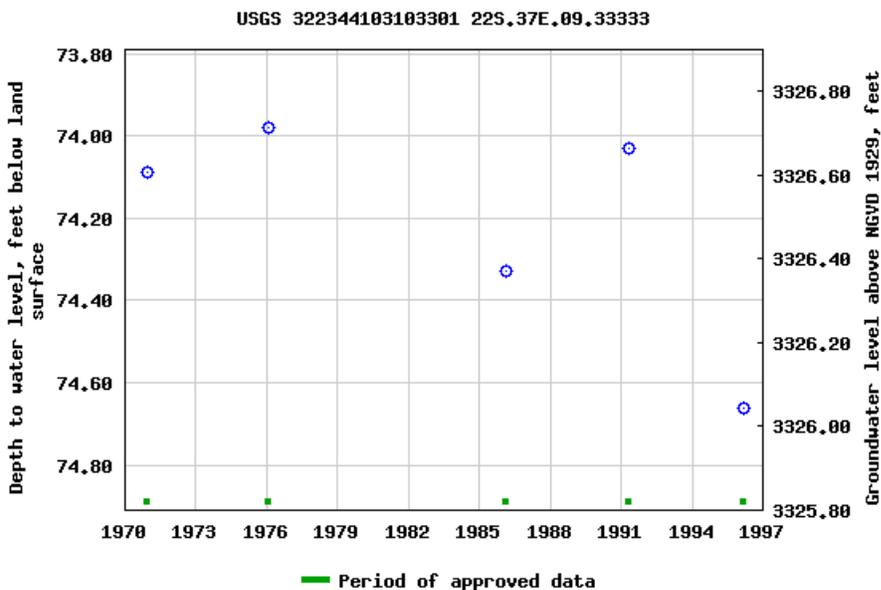
USGS 322344103103301 22S.37E.09.33333

Available data for this site

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°23'57", Longitude 103°10'34" NAD27
 Land-surface elevation 3,400.70 feet above NGVD29
 The depth of the well is 172 feet below land surface.
 This well is completed in the Ogallala Formation (121OGLL) 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.

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2019-11-06 13:24:00 EST

0.58 0.44 nadww01



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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 322357103094801

Minimum number of levels = 1

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

USGS 322357103094801 22S.37E.09.423331

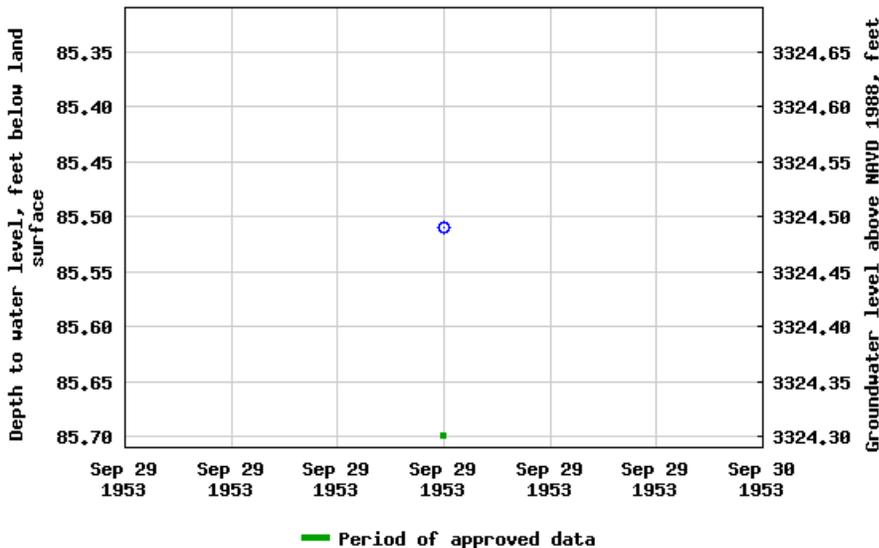
Available data for this site

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°23'57", Longitude 103°09'48" NAD27
 Land-surface elevation 3,410 feet above NAVD88
 The depth of the well is 115 feet below land surface.
 This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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

USGS 322357103094801 22S.37E.09.423331



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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



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0.59 0.45 nadww01



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Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 322358103103401

Minimum number of levels = 1

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

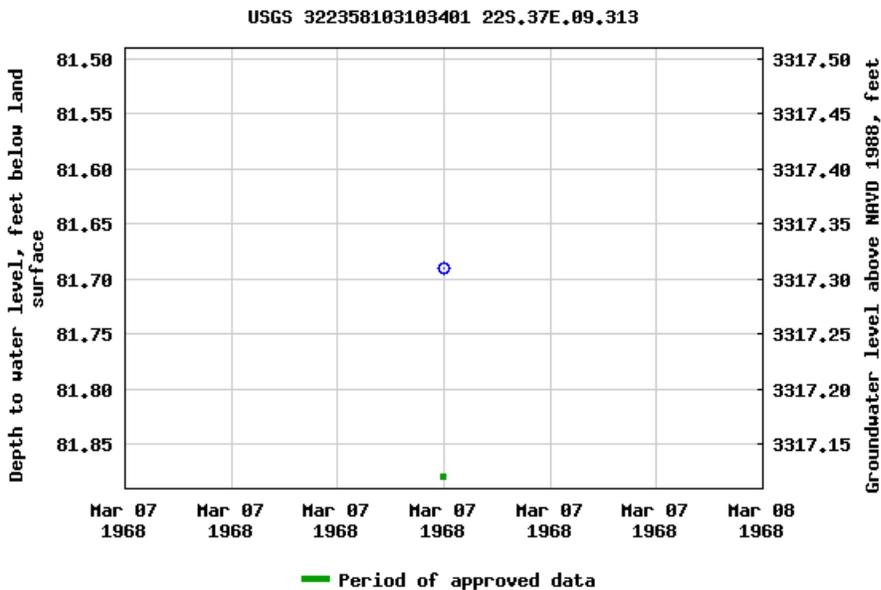
USGS 322358103103401 22S.37E.09.313

Available data for this site

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°23'58", Longitude 103°10'34" NAD27
 Land-surface elevation 3,399 feet above NAVD88

Output formats

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



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Title: Groundwater for USA: Water Levels

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0.56 0.47 nadww01



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Search Results -- 1 sites found

Agency code = usgs
 site_no list =
 • 322359103104101

Minimum number of levels = 1

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

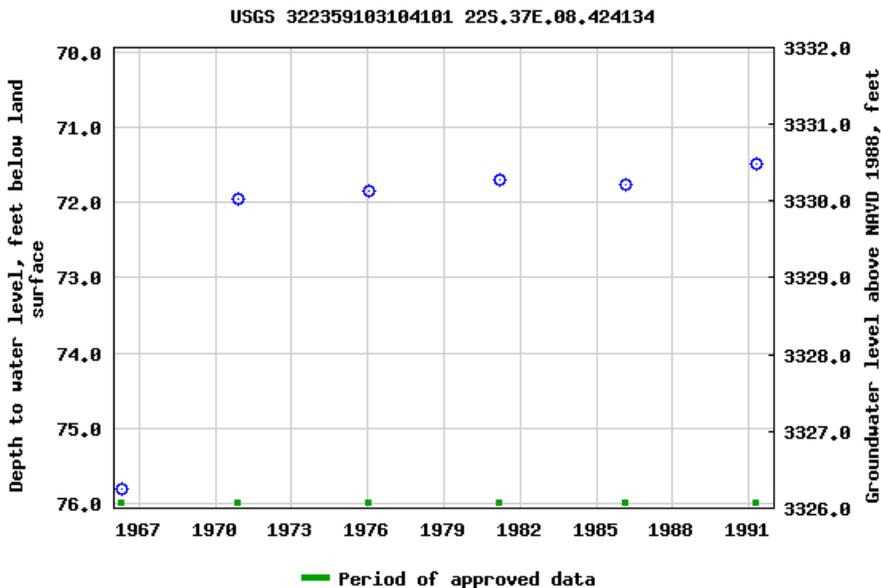
USGS 322359103104101 22S.37E.08.424134

Available data for this site

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°23'59", Longitude 103°10'41" NAD27
 Land-surface elevation 3,402 feet above NAVD88
 The depth of the well is 168 feet below land surface.
 This well is completed in the Ogallala Formation (121OGLL) 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.

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



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Page Last Modified: 2019-11-06 13:24:02 EST

0.52 0.46 nadww01



National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
 site_no list =
 • 322400103103401

Minimum number of levels = 1

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

USGS 322400103103401 22S.37E.09.31313

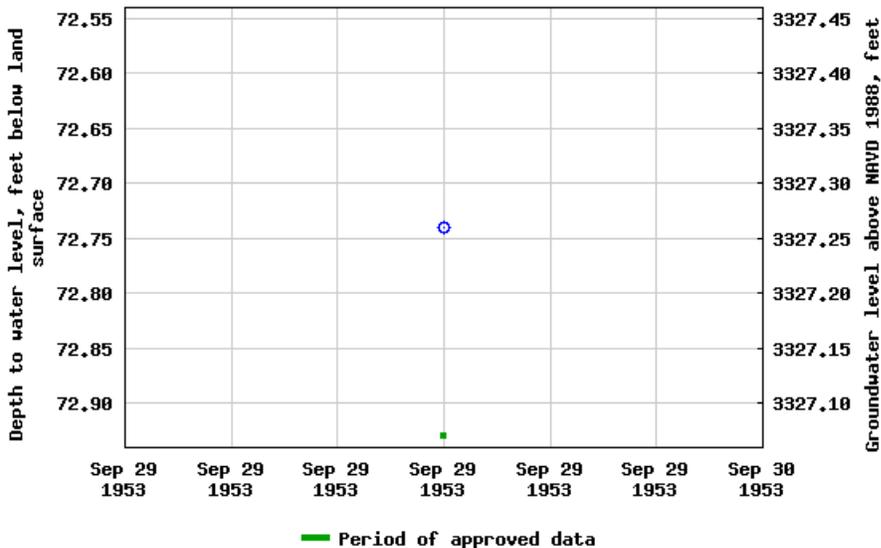
Available data for this site

Lea County, New Mexico
 Hydrologic Unit Code 13070007
 Latitude 32°24'00", Longitude 103°10'34" NAD27
 Land-surface elevation 3,400 feet above NAVD88
 The depth of the well is 140 feet below land surface.
 This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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

USGS 322400103103401 22S.37E.09.31313



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

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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2019-11-06 13:24:03 EST

0.55 0.47 nadww01

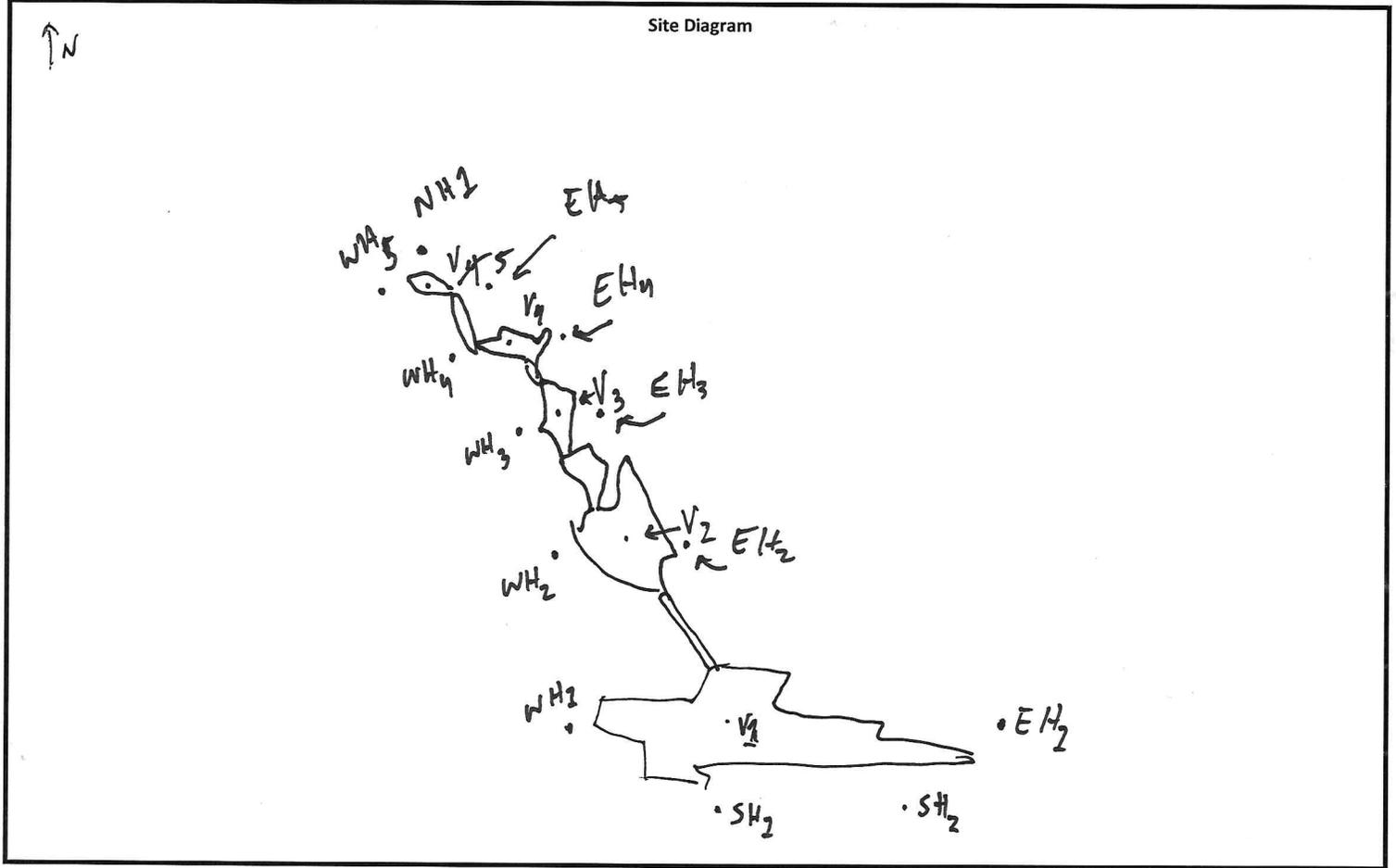
Appendix B

Field Data and Soil Profile Logs



Initial Release Assessment Form

Project: Cole State #10 Clean Up Level: _____ Date: 1/5/19
 Project Number: 11465 Latitude: 32.39277 Longitude: 108° 0' 0" -103.17335

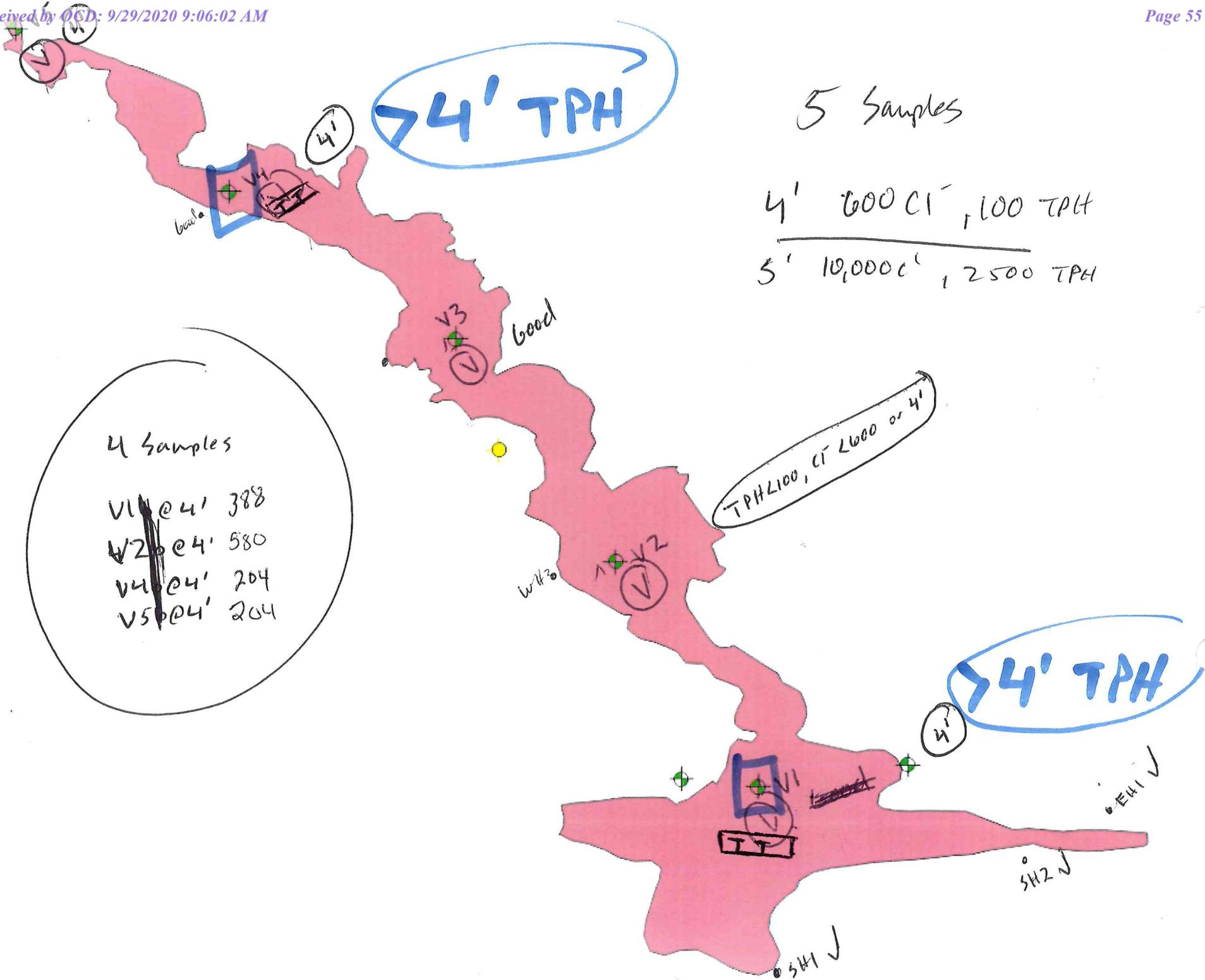


Notes:
 Ground affected at 1' at least.

~Length: ~Width: ~Area: ~Depth:

- | | Yes | No |
|--|-------------------------------------|--------------------------|
| 3-4 Representative Pictures of the Affected Area including sample locations? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Necessary Samples Field Screened and on Ice? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Sample and Field Screen Data Entered on Sample Log? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Was horizontal and vertical delineation achieved? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

2/19/20



5 Samples

4' 600 c¹, 100 TPH

5' 10,000 c¹, 2500 TPH

TPH < 100, c¹ < 600 or 4'

4 Samples

V1 @ 4'	388
V2 @ 4'	580
V4 @ 4'	204
V5 @ 4'	204

4' TPH



Sample Log

Date: 11/5/19

Project: Cole State #10

Project Number: 0 Latitude: 32.39277 Longitude: -103.17335

Sample ID	PID/Odor	Chloride Conc.	GPS
V1 @ Surf.	Yes	1032	10:00
V1V2 @ 1'	Yes	964	10:05
V2 @ Surf	Yes	2320	10:10
V2 @ 1' - R	Y	1380	10:15
V3 @ Surf	Y	1320	10:20
V3 @ 1'	Y	698	10:25
V4 @ Surf	Y	652	10:30
V4 @ 1'	Slight?	896	10:35
V5 @ Surf	Y	<116	10:40
V5 @ 1'	Slight?	312	10:45
<u>11/8/19</u>			
SH 2 @ Surf	No	272	12:00
SH 1 @ 1'	N	140	12:05
SH 2 @ Surf	N	352	12:10
SH 2 @ 1'	N	140	12:15
EH 1 @ Surf	N	200	12:20
EH 1 @ 1'	N	<116	12:25
WH 1 @ Surf	N	168	12:30
WH 1 @ 1'	N	140	12:35
<u>11/9/19</u>			
V1 @ 3'	Y	964	9:10
V1 @ 3.5' - R	Y	1108	9:15
V3 @ 1.5' - R	Maybe?	444	9:40
V4 @ 2' - R	Slight?	400	9:55
V5 @ 1.5' - R	Maybe?	652	10:00
WH 2 @ Surf	N	272	10:30
WH 2 @ 1'	N	652	10:35
WH 3 @ Surf	N	272	10:40
WH 3 @ 1'	N	272 352	10:45
WH 4 @ Surf	N	200	10:50
WH 4 @ 1'	N	200	10:55
NH 5 @ Surf	N	236	11:00
NH 5 @ 1'	N	140	11:05

Received by OCD: 9/29/2020 9:06:02 AM

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

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

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

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Sample Log

Date: 11/5/19

Project: Cole State #10

Project Number: 11465 Latitude: 32.39277 Longitude: -103.17335

Sample ID	PID/Odor	Chloride Conc.	GPS
WH2-B Surf	Slight	Less 116 2:15	
WH2-B 2 Foot	NO	116 2:20	
EH2 Surf	Yes	312 2:25	
EH2 2 foot	Yes	Less 116 2:30	
EH3 Surf	Yes	140 2:35	
EH3 2 foot	Yes	444 2:40	
EH4 Surf	NO	116 2:45	
EH4 2 foot	NO	116 2:50	
EH5 Surf	NO	Less 116 2:55	
EH5 2 foot	NO	200 3:00	
NH1 Surf	NO	Less 116 3:05	
NH1 2 foot	NO	200 3:10	
V1			
V2 @ 3'			
V3 @ 4'			
V4 @ 3'			
V5 @ 3'			
V4 @ 8	Low		
V4 @ 9	Low		
V1 @ 5	6.0		
V1 @ 6	5.0		

1-14-20

Received by OCD: 9/29/2020 9:06:02 AM

Sample Point = SP #1 @ ## etc
 Floor = FL #1 etc
 Sidewall = SW #1 etc

Test Trench = TT #1 @ ##
 Refusal = SP #1 @ 4'-R
 Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples = SP #1 @ 5b or SW #1b
 Stockpile = Stockpile #1
 GPS Sample Points, Center of Comp Areas



Soil Profile

Date: 11/8/19

Project: Cole State #10

Project Number: 11465 Latitude: 32.39277 Longitude: -103.17335

Depth (ft. bgs)

Description

1	Brown Clayey Topsoil w/ Rock
2	
3	
4	Caliche Rock
5	
6	
7	
8	
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37	
38	
39	
40	



Initial Release Assessment Form

Project: Cole State #10

Clean Up Level: _____

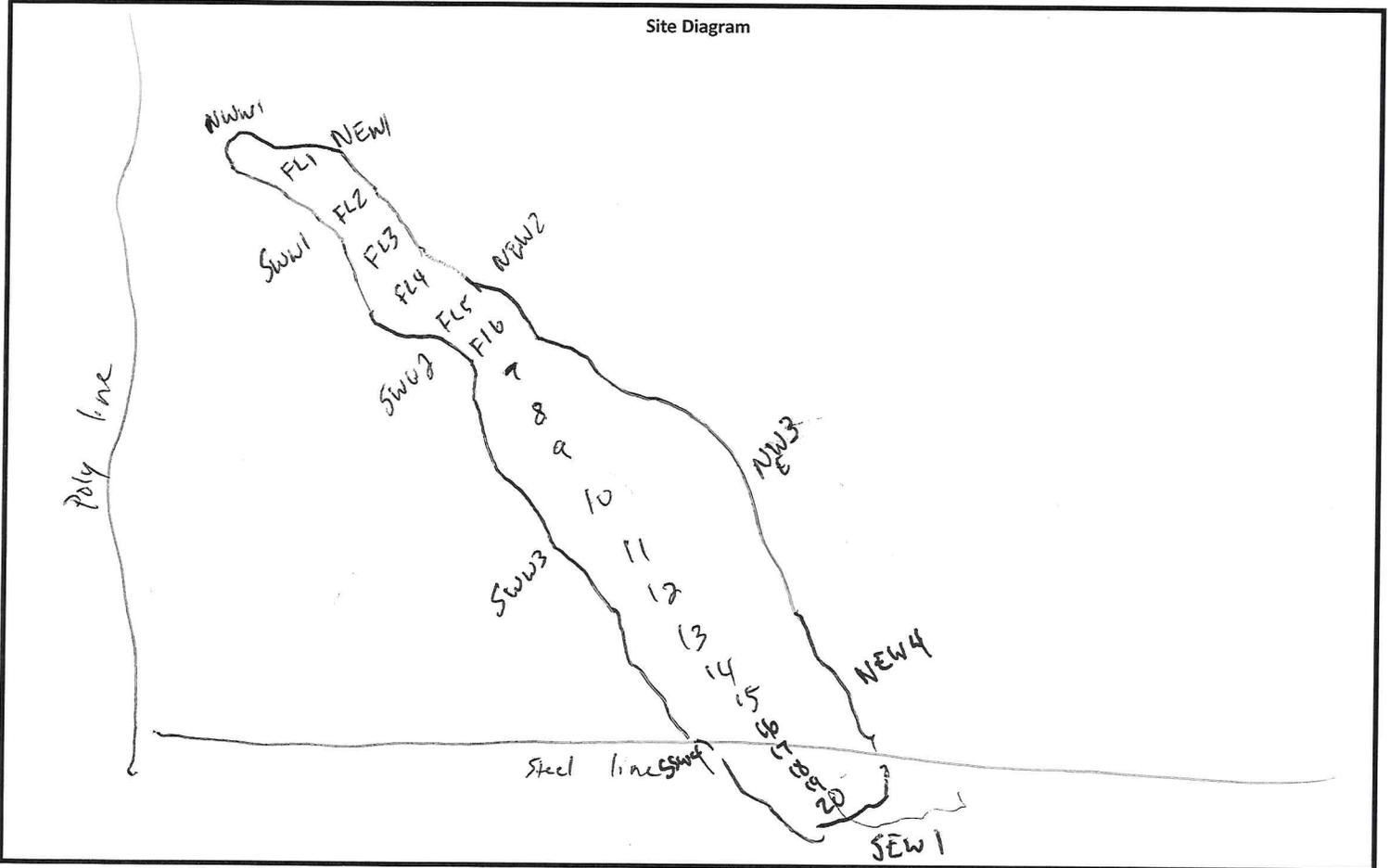
Date: 8/24/20

Project Number: 11465

Latitude: 32.39287

Longitude: 101° 9' -0
-103.17297

Site Diagram



Notes:

~Length:

~Width:

~Area:

~Depth:

Yes	No
-----	----

3-4 Representative Pictures of the Affected Area including sample locations? Yes No

Necessary Samples Field Screened and on Ice? Yes No

Sample and Field Screen Data Entered on Sample Log? Yes No

Was horizontal and vertical delineation achieved? Yes No

Appendix C

Laboratory Analytical Reports



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

November 18, 2019

JOEL LOWRY

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: COLE STATE 10

Enclosed are the results of analyses for samples received by the laboratory on 11/12/19 16:06.

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".

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:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: V 2 @ SURFACE (H903841-01)

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	1.99	0.500	11/14/2019	ND	1.94	97.0	2.00	9.23	
Toluene*	34.6	0.500	11/14/2019	ND	2.01	101	2.00	9.16	
Ethylbenzene*	44.4	0.500	11/14/2019	ND	2.06	103	2.00	9.04	
Total Xylenes*	106	1.50	11/14/2019	ND	6.06	101	6.00	9.02	
Total BTEX	187	3.00	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 130 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1600	16.0	11/14/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1870	50.0	11/14/2019	ND	190	94.8	200	1.49	
DRO >C10-C28*	4980	50.0	11/14/2019	ND	188	93.9	200	19.8	
EXT DRO >C28-C36	434	50.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 175 % 41-142

Surrogate: 1-Chlorooctadecane 191 % 37.6-147

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* = Accredited Analyte

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

Received:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: V 3 @ SURFACE (H903841-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	5.49	2.00	11/14/2019	ND	1.94	97.0	2.00	9.23	
Toluene*	77.8	2.00	11/14/2019	ND	2.01	101	2.00	9.16	
Ethylbenzene*	103	2.00	11/14/2019	ND	2.06	103	2.00	9.04	
Total Xylenes*	259	6.00	11/14/2019	ND	6.06	101	6.00	9.02	
Total BTEX	445	12.0	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1200	16.0	11/14/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	11200	100	11/14/2019	ND	190	94.8	200	1.49		
DRO >C10-C28*	45000	100	11/14/2019	ND	188	93.9	200	19.8		
EXT DRO >C28-C36	6930	100	11/14/2019	ND						

Surrogate: 1-Chlorooctane 600 % 41-142

Surrogate: 1-Chlorooctadecane 884 % 37.6-147

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: V 4 @ 1' (H903841-03)

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.349	0.200	11/14/2019	ND	1.94	97.0	2.00	9.23	
Toluene*	9.53	0.200	11/14/2019	ND	2.01	101	2.00	9.16	
Ethylbenzene*	20.7	0.200	11/14/2019	ND	2.06	103	2.00	9.04	
Total Xylenes*	59.1	0.600	11/14/2019	ND	6.06	101	6.00	9.02	
Total BTEX	89.7	1.20	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 211 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	11/14/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	846	50.0	11/14/2019	ND	190	94.8	200	1.49	
DRO >C10-C28*	2880	50.0	11/14/2019	ND	188	93.9	200	19.8	
EXT DRO >C28-C36	213	50.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 156 % 41-142

Surrogate: 1-Chlorooctadecane 156 % 37.6-147

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

Received:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: V 5 @ SURFACE (H903841-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	5.15	5.00	11/14/2019	ND	1.94	97.0	2.00	9.23	
Toluene*	97.3	10.0	11/14/2019	ND	2.01	101	2.00	9.16	
Ethylbenzene*	171	10.0	11/14/2019	ND	2.06	103	2.00	9.04	
Total Xylenes*	493	30.0	11/14/2019	ND	6.06	101	6.00	9.02	
Total BTEX	767	55.0	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	15400	100	11/14/2019	ND	190	94.8	200	1.49		
DRO >C10-C28*	54200	100	11/14/2019	ND	188	93.9	200	19.8		
EXT DRO >C28-C36	8010	100	11/14/2019	ND						

Surrogate: 1-Chlorooctane 791 % 41-142

Surrogate: 1-Chlorooctadecane 1030 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: SH 1 @ SURFACE (H903841-05)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.94	97.0	2.00	9.23	
Toluene*	0.118	0.050	11/14/2019	ND	2.01	101	2.00	9.16	
Ethylbenzene*	0.105	0.050	11/14/2019	ND	2.06	103	2.00	9.04	
Total Xylenes*	0.320	0.150	11/14/2019	ND	6.06	101	6.00	9.02	
Total BTEX	0.543	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	190	94.8	200	1.49	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	188	93.9	200	19.8	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 90.7 % 41-142

Surrogate: 1-Chlorooctadecane 94.0 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: SH 1 @ 1' (H903841-06)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.94	97.0	2.00	9.23	
Toluene*	<0.050	0.050	11/14/2019	ND	2.01	101	2.00	9.16	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	2.06	103	2.00	9.04	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	6.06	101	6.00	9.02	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	190	94.8	200	1.49	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	188	93.9	200	19.8	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 99.2 % 41-142

Surrogate: 1-Chlorooctadecane 101 % 37.6-147

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: SH 2 @ SURFACE (H903841-07)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.94	97.0	2.00	9.23	
Toluene*	<0.050	0.050	11/14/2019	ND	2.01	101	2.00	9.16	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	2.06	103	2.00	9.04	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	6.06	101	6.00	9.02	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	190	94.8	200	1.49	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	188	93.9	200	19.8	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 95.9 % 41-142

Surrogate: 1-Chlorooctadecane 97.2 % 37.6-147

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: SH 2 @ 1' (H903841-08)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.94	97.0	2.00	9.23	
Toluene*	<0.050	0.050	11/14/2019	ND	2.01	101	2.00	9.16	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	2.06	103	2.00	9.04	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	6.06	101	6.00	9.02	
Total BTEX	<0.300	0.300	11/14/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	190	94.8	200	1.49	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	188	93.9	200	19.8	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 104 % 37.6-147

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 1 @ SURFACE (H903841-09)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	11/14/2019	ND	1.94	97.0	2.00	9.23	
Toluene*	<0.200	0.200	11/14/2019	ND	2.01	101	2.00	9.16	
Ethylbenzene*	<0.200	0.200	11/14/2019	ND	2.06	103	2.00	9.04	
Total Xylenes*	<0.600	0.600	11/14/2019	ND	6.06	101	6.00	9.02	
Total BTEX	<1.20	1.20	11/14/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 95.4 % 41-142

Surrogate: 1-Chlorooctadecane 101 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 1 @ 1' (H903841-10)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 84.8 % 41-142

Surrogate: 1-Chlorooctadecane 88.0 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: WH 1 @ SURFACE (H903841-11)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	19.7	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 88.2 % 41-142

Surrogate: 1-Chlorooctadecane 91.0 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/05/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: WH 1 @ 1' (H903841-12)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	10.5	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 89.9 % 41-142

Surrogate: 1-Chlorooctadecane 93.8 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: V 1 @ 3.5' - R (H903841-13)

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	0.271	0.050	11/15/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	0.809	0.050	11/15/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	2.00	0.150	11/15/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	3.08	0.300	11/15/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 131 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	51.5	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	612	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	55.2	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 99.8 % 41-142

Surrogate: 1-Chlorooctadecane 108 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: V 5 @ 1.5' - R (H903841-14)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	0.084	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	0.235	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	0.319	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	190	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 83.0 % 41-142

Surrogate: 1-Chlorooctadecane 90.3 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: WH 2 @ SURFACE (H903841-15)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 85.5 % 41-142

Surrogate: 1-Chlorooctadecane 87.0 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: WH 2 @ 1' (H903841-16)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 72.3 % 41-142

Surrogate: 1-Chlorooctadecane 74.7 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: WH 3 @ SURFACE (H903841-17)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 92.2 % 41-142

Surrogate: 1-Chlorooctadecane 93.8 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: WH 3 @ 1' (H903841-18)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 89.4 % 41-142

Surrogate: 1-Chlorooctadecane 91.4 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: WH 4 @ SURFACE (H903841-19)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 92.3 % 41-142

Surrogate: 1-Chlorooctadecane 95.1 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: WH 4 @ 1' (H903841-20)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 89.9 % 41-142

Surrogate: 1-Chlorooctadecane 94.0 % 37.6-147

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Analytical Results For:

Etech Environmental & Safety Solutions
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 Fax To: (575) 396-1429

Received: 11/12/2019
 Reported: 11/18/2019
 Project Name: COLE STATE 10
 Project Number: 11465
 Project Location: GRIZZLY ENERGY

Sampling Date: 11/08/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WH 5 @ SURFACE (H903841-21)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 89.4 % 41-142

Surrogate: 1-Chlorooctadecane 88.8 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: WH 5 @ 1' (H903841-22)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 88.0 % 41-142

Surrogate: 1-Chlorooctadecane 90.4 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 2 @ SURFACE (H903841-23)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/15/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/15/2019	ND					

Surrogate: 1-Chlorooctane 92.3 % 41-142

Surrogate: 1-Chlorooctadecane 92.4 % 37.6-147

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Analytical Results For:

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

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 2 @ 1' (H903841-24)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 86.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/15/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/15/2019	ND					

Surrogate: 1-Chlorooctane 93.4 % 41-142

Surrogate: 1-Chlorooctadecane 94.6 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 3 @ SURFACE (H903841-25)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62		
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68		
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89		
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48		
Total BTEX	<0.300	0.300	11/14/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/15/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/15/2019	ND	196	98.2	200	2.10		
DRO >C10-C28*	<10.0	10.0	11/15/2019	ND	192	95.9	200	4.01		
EXT DRO >C28-C36	<10.0	10.0	11/15/2019	ND						

Surrogate: 1-Chlorooctane 90.8 % 41-142

Surrogate: 1-Chlorooctadecane 91.3 % 37.6-147

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Analytical Results For:

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 Fax To: (575) 396-1429

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 3 @ 1' (H903841-26)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/15/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/15/2019	ND					

Surrogate: 1-Chlorooctane 90.3 % 41-142

Surrogate: 1-Chlorooctadecane 91.5 % 37.6-147

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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

Analytical Results For:

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

Received:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 4 @ SURFACE (H903841-27)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/14/2019	ND	1.84	92.2	2.00	4.62		
Toluene*	<0.050	0.050	11/14/2019	ND	1.90	94.8	2.00	6.68		
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.97	98.6	2.00	5.89		
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.77	96.1	6.00	6.48		
Total BTEX	<0.300	0.300	11/14/2019	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/15/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/15/2019	ND	196	98.2	200	2.10		
DRO >C10-C28*	<10.0	10.0	11/15/2019	ND	192	95.9	200	4.01		
EXT DRO >C28-C36	<10.0	10.0	11/15/2019	ND						

Surrogate: 1-Chlorooctane 91.1 % 41-142

Surrogate: 1-Chlorooctadecane 91.7 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 4 @ 1' (H903841-28)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2019	ND	1.84	92.2	2.00	4.62	
Toluene*	<0.050	0.050	11/15/2019	ND	1.90	94.8	2.00	6.68	
Ethylbenzene*	<0.050	0.050	11/15/2019	ND	1.97	98.6	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/15/2019	ND	5.77	96.1	6.00	6.48	
Total BTEX	<0.300	0.300	11/15/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2019	ND	196	98.2	200	2.10	
DRO >C10-C28*	<10.0	10.0	11/15/2019	ND	192	95.9	200	4.01	
EXT DRO >C28-C36	<10.0	10.0	11/15/2019	ND					

Surrogate: 1-Chlorooctane 92.9 % 41-142

Surrogate: 1-Chlorooctadecane 94.3 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 5 @ SURFACE (H903841-29)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/15/2019	ND	1.84	92.2	2.00	4.62		
Toluene*	<0.050	0.050	11/15/2019	ND	1.90	94.8	2.00	6.68		
Ethylbenzene*	<0.050	0.050	11/15/2019	ND	1.97	98.6	2.00	5.89		
Total Xylenes*	<0.150	0.150	11/15/2019	ND	5.77	96.1	6.00	6.48		
Total BTEX	<0.300	0.300	11/15/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	202	101	200	2.38		
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	196	98.2	200	3.97		
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND						

Surrogate: 1-Chlorooctane 105 % 41-142

Surrogate: 1-Chlorooctadecane 109 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: EH 5 @ 1' (H903841-30)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.73	86.5	2.00	8.21	
Toluene*	<0.050	0.050	11/14/2019	ND	1.73	86.6	2.00	8.42	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.76	87.9	2.00	8.10	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.31	88.5	6.00	8.07	
Total BTEX	<0.300	0.300	11/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	202	101	200	2.38	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	196	98.2	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 113 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: NH 1 @ SURFACE (H903841-31)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/14/2019	ND	1.73	86.5	2.00	8.21		
Toluene*	<0.050	0.050	11/14/2019	ND	1.73	86.6	2.00	8.42		
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.76	87.9	2.00	8.10		
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.31	88.5	6.00	8.07		
Total BTEX	<0.300	0.300	11/14/2019	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	202	101	200	2.38		
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	196	98.2	200	3.97		
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND						

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 105 % 37.6-147

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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:	11/12/2019	Sampling Date:	11/08/2019
Reported:	11/18/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: NH 1 @ 1' (H903841-32)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/14/2019	ND	1.73	86.5	2.00	8.21	
Toluene*	<0.050	0.050	11/14/2019	ND	1.73	86.6	2.00	8.42	
Ethylbenzene*	<0.050	0.050	11/14/2019	ND	1.76	87.9	2.00	8.10	
Total Xylenes*	<0.150	0.150	11/14/2019	ND	5.31	88.5	6.00	8.07	
Total BTEX	<0.300	0.300	11/14/2019	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/14/2019	ND	202	101	200	2.38	
DRO >C10-C28*	<10.0	10.0	11/14/2019	ND	196	98.2	200	3.97	
EXT DRO >C28-C36	<10.0	10.0	11/14/2019	ND					

Surrogate: 1-Chlorooctane 103 % 41-142

Surrogate: 1-Chlorooctadecane 108 % 37.6-147

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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.
S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
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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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

BILL TO

ANALYSIS REQUEST

Company Name: Etch 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 #: 11465 Project Owner: Grizzly Energy
 Project Name: Cole State 10
 Project Location: Rural Lea
 Sampler Name: Hayden Scott

P.O. #: _____ Company: Vanguard/Grizzly
 Attn: Carmen Pitt
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	Chloride	TPH (8015M)	BTEX (8021B)
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :							
H903841	V2 @ Surf	g	1	X							11/5/19	10:10	X	X	X	
	V3 @ Surf	g	1	X							11/5/19	10:20	X	X	X	
	V4 @ 1'	g	1	X							11/5/19	10:35	X	X	X	
	V5 @ Surf	g	1	X							11/5/19	10:40	X	X	X	
	SH1 @ Surf	g	1	X							11/5/19	12:00	X	X	X	
	SH1 @ 1'	g	1	X							11/5/19	12:05	X	X	X	
	SH2 @ Surf	g	1	X							11/5/19	12:10	X	X	X	
	SH2 @ 1'	g	1	X							11/5/19	12:15	X	X	X	
	EH1 @ Surf	g	1	X							11/5/19	12:20	X	X	X	
	EH1 @ 1'	g	1	X							11/5/19	12:25	X	X	X	

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Relinquished By: *[Signature]* Date: 11/21/19 Time: 16:00
 Received By: *[Signature]* Date: _____ Time: _____
 Delivered By: (Circle One) -1.92 #97
 Sampler - UPS - Bus - Other: Costumed -1.52

Sample Condition: Cool Intact
 YES NO
 CHECKED BY: *[Signature]* (Initials) YQ

Phone Result: Yes No
 Fax Result: Yes No
 Add'l Phone #: _____
 Add'l Fax #: _____
 REMARKS: _____
 Please email results to joel@etchenv.com.

86 jo 9c ebaD



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 101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Etech Environmental & Safety Solutions, Inc.	P.O. #:
Project Manager: Joel Lowry	Company: Vanguard/Grizzly
Address: P.O. Box 301	Attn: Carmen Pitt
City: Lovington	Address:
State: NM Zip: 88260	City:
Phone #: (575) 396-2378	State: Zip:
Fax #: (575) 396-1429	Phone #:
Project #: 11465	Fax #:
Project Owner: Grizzly Energy	
Project Name: Cole State 10	
Project Location: Rural Lea	
Sampler Name: Hayden Scott	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	Chloride	TPH (8015M)	BTEX (8021B)
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
11	WH1 @ Surf	g	1	X						11/5/19	12:30	X	X	X
12	WH1 @ 1'	g	1	X						11/5/19	12:35	X	X	X
13	V1 @ 3.5' - R	g	1	X						11/8/19	9:15	X	X	X
14	V5 @ 1.5' - R	g	1	X						11/8/19	10:00	X	X	X
15	WH2 @ Surf	g	1	X						11/8/19	10:30	X	X	X
14	WH2 @ 1'	g	1	X						11/8/19	10:35	X	X	X
17	WH3 @ Surf	g	1	X						11/8/19	10:40	X	X	X
18	WH3 @ 1'	g	1	X						11/8/19	10:45	X	X	X
19	WH4 @ Surf	g	1	X						11/8/19	10:50	X	X	X
20	WH4 @ 1'	g	1	X						11/8/19	10:55	X	X	X

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.

Relinquished By: *Matthew* Date: 4/12/19 Time: 16:00

Received By: *Jessica* Date: 4/12/19 Time: 16:00

Delivered By: (Circle One) -1.92 #97

Sampler - UPS - Bus - Other: Corrected -1.52

Sample Condition: Cool Intact Yes No Yes No No

CHECKED BY: (Initials) *Jo*

Phone Result: Yes No Add'l Phone #:

Fax Result: Yes No Add'l Fax #:

REMARKS:

Please email results to joel@etechnv.com.

86 jo LC e8pd



ARDINAL LABORATORIES
 101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Etech Environmental & Safety Solutions, Inc.	P.O. #:
Project Manager: Joel Lowmy	Company: Vanguard/Grizzly
Address: P.O. Box 301	Attn: Carmen Pitt
City: Lovington	State: NM Zip: 88260
Phone #: (575) 396-2378	Fax #: (575) 396-1429
Project #: 11465	Project Owner: Grizzly Energy
Project Name: Cole State 10	City: State: Zip:
Project Location: Rural Lea	Phone #: Fax #:
Sampler Name: Hayden Scott	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	ANALYSIS REQUEST					
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					ACID/BASE:	ICE / COOL	OTHER :	Chloride	TPH (8015M)	BTEX (8021B)
H902841	31	WH5 @ Surf	9	1	X							11/8/19	11:00	X	X	X			
	32	WH5 @ 1'	9	1	X							11/8/19	11:05	X	X	X			
	33	EH2 @ Surf	9	1	X							11/8/19	2:25	X	X	X			
	34	EH2 @ 1'	9	1	X							11/8/19	2:30	X	X	X			
	35	EH3 @ Surf	9	1	X							11/8/19	2:35	X	X	X			
	36	EH3 @ 1'	9	1	X							11/8/19	2:40	X	X	X			
	37	EH4 @ Surf	9	1	X							11/8/19	2:45	X	X	X			
	38	EH4 @ 1'	9	1	X							11/8/19	2:50	X	X	X			
	39	EH5 @ Surf	9	1	X							11/8/19	2:55	X	X	X			
	30	EH5 @ 1'	9	1	X							11/8/19	3:00	X	X	X			

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 analysis. 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 services. 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.

Relinquished By: *[Signature]* Date: 11/12/19 Time: 16:00
 Received By: *[Signature]* Date: 11/12/19 Time: 16:00

Delivered By: (Circle One) -1.98
 Sampler - UPS - Bus - Other: *Converted -1.52*

Sample Condition: Cool Intact
 Yes No

CHECKED BY: *[Signature]* (Initials) *YQ*

REMARKS: Please email results to joel@etechnv.com.

Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:



101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

8c jo 8c ebgd

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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 #: 11465 Project Owner: Grizzly Energy Project Name: Cole State 10 Project Location: Rural Lea Sampler Name: Hayden Scott		P.O. #: BILL TO Company: Vanguard/Grizzly Attn: Carmen Pitt Address: City: State: Zip: Phone #: Fax #:	
FOR LAB USE ONLY Lab I.D. Sample I.D. #903541 31 NH1 @ Surf 32 NH1 @ 1'		(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER : DATE TIME	
Matrix: SOIL, OIL, SLUDGE, OTHER : Preserv: ICE / COOL, OTHER : Sampling:		ANALYSIS REQUEST Chloride TPH (8015M) BTEX (8021B)	
Relinquished By: <i>[Signature]</i> Date: 9/29/19 Time: 16:00 Received By: <i>[Signature]</i> Date: Time:		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #: REMARKS: Please email results to joel@etechnv.com.	
Delivered By: (Circle One) -1.9c Sampler - UPS - Bus - Other: Consistent -1.5c Sample Condition: Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Checked By: <i>[Signature]</i> (Initials) YO		FORM-006 Revision 1.0 † Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476	



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

December 11, 2019

JOEL LOWRY

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: COLE STATE 10

Enclosed are the results of analyses for samples received by the laboratory on 12/06/19 15:25.

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".

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: 12/06/2019
 Reported: 12/11/2019
 Project Name: COLE STATE 10
 Project Number: 11465
 Project Location: GRIZZLY ENERGY

Sampling Date: 12/06/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: V 3 @ 4' (H904096-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/10/2019	ND	1.74	87.1	2.00	12.2	
Toluene*	<0.050	0.050	12/10/2019	ND	1.69	84.7	2.00	12.9	
Ethylbenzene*	0.215	0.050	12/10/2019	ND	1.73	86.5	2.00	12.5	
Total Xylenes*	0.702	0.150	12/10/2019	ND	5.25	87.4	6.00	12.4	
Total BTEX	0.917	0.300	12/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1150	16.0	12/10/2019	ND	400	100	400	7.69	QM-07

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	35.1	10.0	12/10/2019	ND	225	113	200	1.94	
DRO >C10-C28*	758	10.0	12/10/2019	ND	228	114	200	3.10	
EXT DRO >C28-C36	106	10.0	12/10/2019	ND					

Surrogate: 1-Chlorooctane 114 % 41-142

Surrogate: 1-Chlorooctadecane 128 % 37.6-147

Cardinal Laboratories

* = Accredited Analyte

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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:	12/06/2019	Sampling Date:	12/06/2019
Reported:	12/11/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: V 4 @ 3' (H904096-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/10/2019	ND	1.74	87.1	2.00	12.2	
Toluene*	<0.050	0.050	12/10/2019	ND	1.69	84.7	2.00	12.9	
Ethylbenzene*	<0.050	0.050	12/10/2019	ND	1.73	86.5	2.00	12.5	
Total Xylenes*	<0.150	0.150	12/10/2019	ND	5.25	87.4	6.00	12.4	
Total BTEX	<0.300	0.300	12/10/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/10/2019	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2019	ND	225	113	200	1.94	
DRO >C10-C28*	468	10.0	12/10/2019	ND	228	114	200	3.10	
EXT DRO >C28-C36	86.4	10.0	12/10/2019	ND					

Surrogate: 1-Chlorooctane 107 % 41-142

Surrogate: 1-Chlorooctadecane 126 % 37.6-147

Cardinal Laboratories

* = Accredited Analyte

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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:	12/06/2019	Sampling Date:	12/06/2019
Reported:	12/11/2019	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY		

Sample ID: V 5 @ 3' (H904096-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	12/10/2019	ND	400	100	400	7.69	

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*=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

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*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

9 jo 9 ebaD



101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Grizzly Energy, LLC
 Project Manager: Joel Lowry
 Address: 3100 Plains Hwy
 City: Lovington State: NM Zip: 88260
 Phone #: 575-396-2378 Fax #: 575-396-1429
 Project #: 11465 Project Owner: Grizzly Energy, LLC
 Project Name: Cole State #10
 Project Location: Rural Lea
 Sampler Name:
 FOR LAB USE ONLY

BILL TO
 P.O. #: Company: Grizzly Operating
 Attn: Carmen Pitt
 Address: 4001 Pembrook
 City: State: NM Zip:
 Phone #: Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV		DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			
H904096													
1	V3@4'	G 1	5								12/6/19	11:55	Chloride
2	V4@3'	G 1	5								12/6/19	11:10	TPH
3	V5@3'	G 1	5								12/6/19	10:55	BTEX 8021

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Relinquished By: *[Signature]* Date: 12/6/19 Time: 15:25
 Received By: *[Signature]* Date: 12/6/19 Time: 10:55

Delivered By: (Circle One) Site #97
 Sampler - UPS - Bus - Other: Counted 350
 Sample Condition: Cool Intact
 Checked By: *[Signature]* (Initials) YO

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476
 FORM-006 R 2.0
 REMARKS: Email results to joel@etechnv.com
 Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:



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

January 06, 2020

JOEL LOWRY

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: COLE STATE 10

Enclosed are the results of analyses for samples received by the laboratory on 12/31/19 16:08.

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".

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:	12/31/2019	Sampling Date:	12/23/2019
Reported:	01/06/2020	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Jodi Henson
Project Location:	GRIZZLY ENERGY-LEA CO		

Sample ID: V1 @ 4' (H904325-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/02/2020	ND	1.95	97.7	2.00	2.10	
Toluene*	0.070	0.050	01/02/2020	ND	1.95	97.6	2.00	1.84	
Ethylbenzene*	0.342	0.050	01/02/2020	ND	2.00	100	2.00	2.09	
Total Xylenes*	0.591	0.150	01/02/2020	ND	5.83	97.1	6.00	2.08	
Total BTEX	1.00	0.300	01/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	01/02/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	37.9	10.0	01/03/2020	ND	225	112	200	0.325		
DRO >C10-C28*	5990	10.0	01/03/2020	ND	219	110	200	0.765		
EXT DRO >C28-C36	1450	10.0	01/03/2020	ND						

Surrogate: 1-Chlorooctane 139 % 41-142

Surrogate: 1-Chlorooctadecane 315 % 37.6-147

Cardinal Laboratories

* = Accredited Analyte

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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:	12/31/2019	Sampling Date:	12/23/2019
Reported:	01/06/2020	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Jodi Henson
Project Location:	GRIZZLY ENERGY-LEA CO		

Sample ID: V2 @ 4' (H904325-02)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/03/2020	ND	1.95	97.7	2.00	2.10	
Toluene*	<0.050	0.050	01/03/2020	ND	1.95	97.6	2.00	1.84	
Ethylbenzene*	0.155	0.050	01/03/2020	ND	2.00	100	2.00	2.09	
Total Xylenes*	<0.150	0.150	01/03/2020	ND	5.83	97.1	6.00	2.08	
Total BTEX	<0.300	0.300	01/03/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	01/02/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	11.7	10.0	01/03/2020	ND	225	112	200	0.325		
DRO >C10-C28*	697	10.0	01/03/2020	ND	219	110	200	0.765		
EXT DRO >C28-C36	173	10.0	01/03/2020	ND						

Surrogate: 1-Chlorooctane 134 % 41-142

Surrogate: 1-Chlorooctadecane 153 % 37.6-147

Cardinal Laboratories

* = Accredited Analyte

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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:	12/31/2019	Sampling Date:	12/23/2019
Reported:	01/06/2020	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Jodi Henson
Project Location:	GRIZZLY ENERGY-LEA CO		

Sample ID: V4 @ 4' (H904325-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	01/03/2020	ND	1.95	97.7	2.00	2.10	
Toluene*	<0.100	0.100	01/03/2020	ND	1.95	97.6	2.00	1.84	
Ethylbenzene*	0.417	0.100	01/03/2020	ND	2.00	100	2.00	2.09	
Total Xylenes*	0.557	0.300	01/03/2020	ND	5.83	97.1	6.00	2.08	
Total BTEX	0.974	0.600	01/03/2020	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	01/02/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	50.7	10.0	01/03/2020	ND	225	112	200	0.325		
DRO >C10-C28*	6970	10.0	01/03/2020	ND	219	110	200	0.765		
EXT DRO >C28-C36	1500	10.0	01/03/2020	ND						

Surrogate: 1-Chlorooctane 157 % 41-142

Surrogate: 1-Chlorooctadecane 326 % 37.6-147

Cardinal Laboratories

* = Accredited Analyte

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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:	12/31/2019	Sampling Date:	12/23/2019
Reported:	01/06/2020	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Jodi Henson
Project Location:	GRIZZLY ENERGY-LEA CO		

Sample ID: V5 @ 4' (H904325-04)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/03/2020	ND	1.95	97.7	2.00	2.10	
Toluene*	<0.050	0.050	01/03/2020	ND	1.95	97.6	2.00	1.84	
Ethylbenzene*	<0.050	0.050	01/03/2020	ND	2.00	100	2.00	2.09	
Total Xylenes*	<0.150	0.150	01/03/2020	ND	5.83	97.1	6.00	2.08	
Total BTEX	<0.300	0.300	01/03/2020	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	01/02/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/03/2020	ND	225	112	200	0.325		
DRO >C10-C28*	654	10.0	01/03/2020	ND	219	110	200	0.765		
EXT DRO >C28-C36	156	10.0	01/03/2020	ND						

Surrogate: 1-Chlorooctane 129 % 41-142

Surrogate: 1-Chlorooctadecane 161 % 37.6-147

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

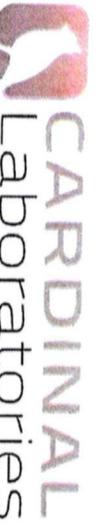
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

Company Name: Eteck Environmental
 Project Manager: Seel Lower
 Address: 3160 Plains Hwy
 City: Lovington State: NM Zip: 88260
 Phone #: 432-406-4457 Fax #: _____
 Project #: Cole State 10 Project Owner: Grizzly
 Project Name: _____
 Project Location: lea Co, New Mexico
 Sampler Name: Miguel Ramirez
 FOR LAB USE ONLY

P.O. #: _____
 Company: _____
 Attn: _____
 Address: _____
 City: _____
 State: _____ Zip: _____
 Phone #: _____
 Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	Chloride	TPH	BTEX 8021
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
HQ04325	V1041	G	1			X				12-23-19	9:00	X	X	X
	V2041	G	1			X				12-23-19	9:15	X	X	X
	V4041	G	1			X				12-23-19	9:30	X	X	X
	V5041	G	1			X				12-23-19	9:45	X	X	X

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Relinquished By: [Signature] Date: 9-31-19
 Received By: [Signature] Date: 9-08
 Time: _____
 Relinquished By: _____ Date: _____
 Received By: _____ Date: _____
 Time: _____

Delivered By: (Circle One)
 Sampler - UPS - Bus - Other: Other
 Sample Condition
 Intact
 Yes No
 Yes No
 CHECKED BY: [Signature]

REMARKS: email results to joel@eteckenv.com
pm@eteckenv.com
lauri@eteckenv.com
 Add'l Phone #: _____
 Add'l Fax #: _____

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476
 FORM-005 R 2.0



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

February 24, 2020

JOEL LOWRY

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: COLE STATE 10

Enclosed are the results of analyses for samples received by the laboratory on 02/19/20 15:46.

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".

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:	02/19/2020	Sampling Date:	02/19/2020
Reported:	02/24/2020	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY-LEA CO		

Sample ID: V 1 @ 5 (H000526-01)

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	02/21/2020	ND	198	99.2	200	0.403	
DRO >C10-C28*	<10.0	10.0	02/21/2020	ND	186	93.0	200	1.55	
EXT DRO >C28-C36	<10.0	10.0	02/21/2020	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>94.9 %</i>	<i>44.3-144</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>97.6 %</i>	<i>42.2-156</i>						

Sample ID: V 1 @ 6 (H000526-02)

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	02/21/2020	ND	198	99.2	200	0.403	
DRO >C10-C28*	<10.0	10.0	02/21/2020	ND	186	93.0	200	1.55	
EXT DRO >C28-C36	<10.0	10.0	02/21/2020	ND					
<i>Surrogate: 1-Chlorooctane</i>		<i>93.8 %</i>	<i>44.3-144</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>97.2 %</i>	<i>42.2-156</i>						

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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:	02/19/2020	Sampling Date:	02/19/2020
Reported:	02/24/2020	Sampling Type:	Soil
Project Name:	COLE STATE 10	Sampling Condition:	Cool & Intact
Project Number:	11465	Sample Received By:	Tamara Oldaker
Project Location:	GRIZZLY ENERGY-LEA CO		

Sample ID: V 4 @ 8 (H000526-03)

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	02/21/2020	ND	198	99.2	200	0.403	
DRO >C10-C28*	<10.0	10.0	02/21/2020	ND	186	93.0	200	1.55	
EXT DRO >C28-C36	<10.0	10.0	02/21/2020	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>94.3 %</i>	<i>44.3-144</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>99.2 %</i>	<i>42.2-156</i>							

Sample ID: V 4 @ 9 (H000526-04)

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	02/21/2020	ND	198	99.2	200	0.403	
DRO >C10-C28*	<10.0	10.0	02/21/2020	ND	186	93.0	200	1.55	
EXT DRO >C28-C36	<10.0	10.0	02/21/2020	ND					
<i>Surrogate: 1-Chlorooctane</i>	<i>93.3 %</i>	<i>44.3-144</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>97.1 %</i>	<i>42.2-156</i>							

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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

- 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

9 jo 9 eba d



101 East Mariana, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Elech Environmental & Safety Solutions Project Manager: Joel Lowry Address: 3100 Plains Hwy City: Lovington State: NM Zip: 88260 Phone #: 575-396-2378 Fax #: 575-396-1429 Project #: 11465 Project Owner: Project Name: Cole State #40 Project Location: Rural lee Sampler Name: Heather Villa <small>FOR LAB USE ONLY</small>		P.O. #: Company: Cr. 2214 Attn: Carmen P. H Address: City: State: Zip: Phone #: Fax #:	
Lab I.D. H000526 Sample I.D.		BILL TO ANALYSIS REQUEST	
(G)RAB OR (C)OMF # CONTAINERS MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER : PRESERV SAMPLING		DATE TIME	
1 V1 Q5 A 1 X 119.00 9:50 2 V2 Q6 A 1 X 119.00 10:00 3 V4 Q8 A 1 X 119.00 11:00 4 V4 Q9 A 1 X 119.00 12:00		Chloride TPH BTEX 8021	
Relinquished By: <i>[Signature]</i> Date: 2/19/20 Time: 15:46 Received By: <i>[Signature]</i> Date: _____ Time: _____		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #: REMARKS: Email results to <u>PM@Etecheny.com</u> Client Contacts: _____	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <u>3.2c</u> #113 Sample Condition Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Checked By: <u>155</u>		+ Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476	



Certificate of Analysis Summary 670837

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Cole State #10

Project Id: 11465
Contact: PM
Project Location: Lea County, NM

Date Received in Lab: Tue 08.25.2020 11:15
Report Date: 08.31.2020 16:22
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	670837-001	670837-002	670837-003	670837-004	670837-005	670837-006
	<i>Field Id:</i>	NWW1	NEW1	SWW1	FL1 @ 4'	FL2 @ 4'	FL3 @ 4'
	<i>Depth:</i>	SOIL	SOIL	SOIL	4- ft	4- ft	4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.24.2020 00:00	08.24.2020 00:00	08.24.2020 00:00	08.24.2020 00:00	08.24.2020 00:00	08.24.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.26.2020 08:30	08.26.2020 08:30	08.26.2020 08:30	08.26.2020 08:30	08.26.2020 08:30	08.26.2020 08:30
	<i>Analyzed:</i>	08.26.2020 11:35	08.26.2020 11:55	08.26.2020 12:16	08.26.2020 12:36	08.26.2020 12:57	08.26.2020 13:17
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	0.0170 0.00201
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	0.0600 0.00201
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399	<0.00396 0.00396	<0.00398 0.00398	0.0785 0.00402
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	0.0595 0.00201
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	0.138 0.00201
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	0.215 0.00201
Chloride by EPA 300	<i>Extracted:</i>	08.25.2020 16:00	08.25.2020 16:00	08.25.2020 16:00	08.25.2020 16:00	08.25.2020 16:00	08.25.2020 16:00
	<i>Analyzed:</i>	08.25.2020 22:21	08.25.2020 22:37	08.25.2020 22:42	08.25.2020 22:48	08.25.2020 22:53	08.25.2020 23:03
	<i>Units/RL:</i>	mg/kg RL					
Chloride		9.90 5.02	11.7 4.99	63.4 25.2	490 24.9	218 24.8	441 25.2
TPH By SW8015 Mod	<i>Extracted:</i>	08.26.2020 12:00	08.26.2020 12:00	08.26.2020 12:00	08.26.2020 12:00	08.26.2020 12:00	08.26.2020 12:00
	<i>Analyzed:</i>	08.28.2020 23:54	08.28.2020 22:42	08.29.2020 00:18	08.29.2020 00:41	08.29.2020 01:05	08.29.2020 01:29
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	226 49.9
Diesel Range Organics (DRO)		420 50.0	<50.0 50.0	1260 49.9	<50.0 50.0	228 49.9	1580 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	117 49.9	<50.0 50.0	<49.9 49.9	120 49.9
Total TPH		420 50.0	<50.0 50.0	1380 49.9	<50.0 50.0	228 49.9	1930 49.9

BRL - Below Reporting Limit

Jessica Kramer

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

Analytical Report 670837

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Cole State #10

11465

08.31.2020

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

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



08.31.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **670837**

Cole State #10

Project Address: Lea 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) 670837. 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. 670837 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 670837

Etech Environmental & Safety Solution, Inc, Midland, TX

Cole State #10

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NWW1	S	08.24.2020 00:00		670837-001
NEW1	S	08.24.2020 00:00		670837-002
SWW1	S	08.24.2020 00:00		670837-003
FL1 @ 4'	S	08.24.2020 00:00	4 ft	670837-004
FL2 @ 4'	S	08.24.2020 00:00	4 ft	670837-005
FL3 @ 4'	S	08.24.2020 00:00	4 ft	670837-006



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Cole State #10

Project ID: 11465
Work Order Number(s): 670837

Report Date: 08.31.2020
Date Received: 08.25.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3135648 BTEX by EPA 8021B

Lab Sample ID 670837-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 670837-001, -002, -003, -004, -005, -006.

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



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **NWW1** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-001 Date Collected: 08.24.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.25.2020 16:00 Basis: Wet Weight
 Seq Number: 3135539

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.90	5.02	mg/kg	08.25.2020 22:21		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.26.2020 12:00 Basis: Wet Weight
 Seq Number: 3135951

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.28.2020 23:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	420	50.0	mg/kg	08.28.2020 23:54		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.28.2020 23:54	U	1
Total TPH	PHC635	420	50.0	mg/kg	08.28.2020 23:54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	08.28.2020 23:54	
o-Terphenyl	84-15-1	108	%	70-130	08.28.2020 23:54	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **NWW1** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-001 Date Collected: 08.24.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.26.2020 08:30 Basis: Wet Weight
 Seq Number: 3135648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.26.2020 11:35	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.26.2020 11:35	UX	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.26.2020 11:35	UX	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.26.2020 11:35	UX	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.26.2020 11:35	UX	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.26.2020 11:35	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.26.2020 11:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.26.2020 11:35	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.26.2020 11:35	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **NEW1** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-002 Date Collected: 08.24.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.25.2020 16:00 Basis: Wet Weight
 Seq Number: 3135539

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.7	4.99	mg/kg	08.25.2020 22:37		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.26.2020 12:00 Basis: Wet Weight
 Seq Number: 3135951

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.28.2020 22:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.28.2020 22:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.28.2020 22:42	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.28.2020 22:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	08.28.2020 22:42	
o-Terphenyl	84-15-1	111	%	70-130	08.28.2020 22:42	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **NEW1** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-002 Date Collected: 08.24.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.26.2020 08:30 Basis: Wet Weight
 Seq Number: 3135648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.26.2020 11:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.26.2020 11:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.26.2020 11:55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.26.2020 11:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.26.2020 11:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.26.2020 11:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.26.2020 11:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.26.2020 11:55	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.26.2020 11:55	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX

Cole State #10

Sample Id: **SWW1** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-003 Date Collected: 08.24.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.25.2020 16:00 Basis: Wet Weight
 Seq Number: 3135539

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	63.4	25.2	mg/kg	08.25.2020 22:42		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.26.2020 12:00 Basis: Wet Weight
 Seq Number: 3135951

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 00:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	1260	49.9	mg/kg	08.29.2020 00:18		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	117	49.9	mg/kg	08.29.2020 00:18		1
Total TPH	PHC635	1380	49.9	mg/kg	08.29.2020 00:18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	08.29.2020 00:18	
o-Terphenyl	84-15-1	108	%	70-130	08.29.2020 00:18	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **SWW1** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-003 Date Collected: 08.24.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.26.2020 08:30 Basis: Wet Weight
 Seq Number: 3135648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.26.2020 12:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.26.2020 12:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.26.2020 12:16	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.26.2020 12:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.26.2020 12:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.26.2020 12:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.26.2020 12:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	08.26.2020 12:16	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.26.2020 12:16	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL1 @ 4'** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-004 Date Collected: 08.24.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.25.2020 16:00 Basis: Wet Weight
 Seq Number: 3135539

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	490	24.9	mg/kg	08.25.2020 22:48		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.26.2020 12:00 Basis: Wet Weight
 Seq Number: 3135951

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.29.2020 00:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.29.2020 00:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.29.2020 00:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.29.2020 00:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	08.29.2020 00:41	
o-Terphenyl	84-15-1	113	%	70-130	08.29.2020 00:41	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL1 @ 4'	Matrix: Soil	Date Received: 08.25.2020 11:15
Lab Sample Id: 670837-004	Date Collected: 08.24.2020 00:00	Sample Depth: 4 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5035A
Tech: KTL		% Moisture:
Analyst: KTL	Date Prep: 08.26.2020 08:30	Basis: Wet Weight
Seq Number: 3135648		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.26.2020 12:36	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.26.2020 12:36	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.26.2020 12:36	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.26.2020 12:36	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.26.2020 12:36	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.26.2020 12:36	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.26.2020 12:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.26.2020 12:36	
4-Bromofluorobenzene	460-00-4	112	%	70-130	08.26.2020 12:36	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL2 @ 4'** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-005 Date Collected: 08.24.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.25.2020 16:00 Basis: Wet Weight
 Seq Number: 3135539

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	218	24.8	mg/kg	08.25.2020 22:53		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.26.2020 12:00 Basis: Wet Weight
 Seq Number: 3135951

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 01:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	228	49.9	mg/kg	08.29.2020 01:05		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.29.2020 01:05	U	1
Total TPH	PHC635	228	49.9	mg/kg	08.29.2020 01:05		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	08.29.2020 01:05	
o-Terphenyl	84-15-1	110	%	70-130	08.29.2020 01:05	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL2 @ 4'	Matrix: Soil	Date Received: 08.25.2020 11:15
Lab Sample Id: 670837-005	Date Collected: 08.24.2020 00:00	Sample Depth: 4 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5035A
Tech: KTL		% Moisture:
Analyst: KTL	Date Prep: 08.26.2020 08:30	Basis: Wet Weight
Seq Number: 3135648		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.26.2020 12:57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.26.2020 12:57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.26.2020 12:57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.26.2020 12:57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.26.2020 12:57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.26.2020 12:57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.26.2020 12:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.26.2020 12:57	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.26.2020 12:57	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL3 @ 4'** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-006 Date Collected: 08.24.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.25.2020 16:00 Basis: Wet Weight
 Seq Number: 3135539

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	441	25.2	mg/kg	08.25.2020 23:03		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.26.2020 12:00 Basis: Wet Weight
 Seq Number: 3135951

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	226	49.9	mg/kg	08.29.2020 01:29		1
Diesel Range Organics (DRO)	C10C28DRO	1580	49.9	mg/kg	08.29.2020 01:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	120	49.9	mg/kg	08.29.2020 01:29		1
Total TPH	PHC635	1930	49.9	mg/kg	08.29.2020 01:29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	08.29.2020 01:29	
o-Terphenyl	84-15-1	111	%	70-130	08.29.2020 01:29	



Certificate of Analytical Results 670837

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL3 @ 4'** Matrix: Soil Date Received: 08.25.2020 11:15
 Lab Sample Id: 670837-006 Date Collected: 08.24.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.26.2020 08:30 Basis: Wet Weight
 Seq Number: 3135648

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.26.2020 13:17	U	1
Toluene	108-88-3	0.0170	0.00201	mg/kg	08.26.2020 13:17		1
Ethylbenzene	100-41-4	0.0600	0.00201	mg/kg	08.26.2020 13:17		1
m,p-Xylenes	179601-23-1	0.0785	0.00402	mg/kg	08.26.2020 13:17		1
o-Xylene	95-47-6	0.0595	0.00201	mg/kg	08.26.2020 13:17		1
Total Xylenes	1330-20-7	0.138	0.00201	mg/kg	08.26.2020 13:17		1
Total BTEX		0.215	0.00201	mg/kg	08.26.2020 13:17		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	121	%	70-130	08.26.2020 13:17		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.26.2020 13:17		



Etech Environmental & Safety Solution, Inc
Cole State #10

Analytical Method: Chloride by EPA 300

Seq Number: 3135539 Matrix: Solid Prep Method: E300P
 MB Sample Id: 7710137-1-BLK LCS Sample Id: 7710137-1-BKS Date Prep: 08.25.2020
 LCSD Sample Id: 7710137-1-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	247	99	246	98	90-110	0	20	mg/kg	08.25.2020 21:39	

Analytical Method: Chloride by EPA 300

Seq Number: 3135539 Matrix: Soil Prep Method: E300P
 Parent Sample Id: 670837-006 MS Sample Id: 670837-006 S Date Prep: 08.25.2020
 MSD Sample Id: 670837-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	441	1260	1800	108	1800	108	90-110	0	20	mg/kg	08.25.2020 23:09	

Analytical Method: Chloride by EPA 300

Seq Number: 3135539 Matrix: Soil Prep Method: E300P
 Parent Sample Id: 670839-011 MS Sample Id: 670839-011 S Date Prep: 08.25.2020
 MSD Sample Id: 670839-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	652	250	889	95	893	96	90-110	0	20	mg/kg	08.25.2020 21:55	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3135951 Matrix: Solid Prep Method: SW8015P
 MB Sample Id: 7710240-1-BLK LCS Sample Id: 7710240-1-BKS Date Prep: 08.26.2020
 LCSD Sample Id: 7710240-1-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	937	94	975	98	70-130	4	20	mg/kg	08.28.2020 21:51	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	1010	101	70-130	0	20	mg/kg	08.28.2020 21:51	

Surrogate

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		94		92		70-130	%	08.28.2020 21:51
o-Terphenyl	102		96		84		70-130	%	08.28.2020 21:51

Analytical Method: TPH By SW8015 Mod

Seq Number: 3135951 Matrix: Solid Prep Method: SW8015P
 MB Sample Id: 7710240-1-BLK Date Prep: 08.26.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.28.2020 21:24	

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
Cole State #10

Analytical Method: TPH By SW8015 Mod

Seq Number: 3135951

Parent Sample Id: 670837-002

Matrix: Soil

MS Sample Id: 670837-002 S

Prep Method: SW8015P

Date Prep: 08.26.2020

MSD Sample Id: 670837-002 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	998	1060	106	1090	109	70-130	3	20	mg/kg	08.28.2020 23:06	
Diesel Range Organics (DRO)	<49.9	998	1180	118	1210	121	70-130	3	20	mg/kg	08.28.2020 23:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		117		70-130	%	08.28.2020 23:06
o-Terphenyl	116		117		70-130	%	08.28.2020 23:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135648

MB Sample Id: 7710249-1-BLK

Matrix: Solid

LCS Sample Id: 7710249-1-BKS

Prep Method: SW5035A

Date Prep: 08.26.2020

LCSD Sample Id: 7710249-1-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	0.0914	91	0.0864	86	70-130	6	35	mg/kg	08.26.2020 09:14	
Toluene	<0.00200	0.100	0.0836	84	0.0816	82	70-130	2	35	mg/kg	08.26.2020 09:14	
Ethylbenzene	<0.00200	0.100	0.0856	86	0.0851	85	70-130	1	35	mg/kg	08.26.2020 09:14	
m,p-Xylenes	<0.00400	0.200	0.172	86	0.175	88	70-130	2	35	mg/kg	08.26.2020 09:14	
o-Xylene	<0.00200	0.100	0.0862	86	0.0872	87	70-130	1	35	mg/kg	08.26.2020 09:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		97		70-130	%	08.26.2020 09:14
4-Bromofluorobenzene	97		104		106		70-130	%	08.26.2020 09:14

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135648

Parent Sample Id: 670837-001

Matrix: Soil

MS Sample Id: 670837-001 S

Prep Method: SW5035A

Date Prep: 08.26.2020

MSD Sample Id: 670837-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0698	70	0.0741	74	70-130	6	35	mg/kg	08.26.2020 09:55	
Toluene	<0.00200	0.0998	0.0652	65	0.0670	67	70-130	3	35	mg/kg	08.26.2020 09:55	X
Ethylbenzene	<0.00200	0.0998	0.0628	63	0.0608	61	70-130	3	35	mg/kg	08.26.2020 09:55	X
m,p-Xylenes	<0.00399	0.200	0.127	64	0.120	60	70-130	6	35	mg/kg	08.26.2020 09:55	X
o-Xylene	<0.00200	0.0998	0.0633	63	0.0607	61	70-130	4	35	mg/kg	08.26.2020 09:55	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		98		70-130	%	08.26.2020 09:55
4-Bromofluorobenzene	98		112		70-130	%	08.26.2020 09:55

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



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) 794-1236
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Chain of Custody

Work Order No: 6710837

www.xenco.com Page 1 of 1

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

Bill-to: (if different)
 Company Name: ARRZ Energy
 Address:
 City, State ZIP:

Program: UST/PST PRP Brownfields RRC Superfund
 State of Project:
 Reporting Level Level I PST/UST TRR Level II
 Deliverables: EDD ADAPT Other:

Project Name: Wole State #10 Turn Around
 Project Number: 11465 Routine:
 Project Location: Lea County, NM Rush:
 Sampler's Name: M. J. R. Ramirez Due Date:
 PO #:

SAMPLE RECEIPT
 Temperature (°C): 21.05 Yes No
 Received Intact: Yes No
 Cooler Custody Seals: Yes No
 Sample Custody Seals: Yes No
 Total Containers: 1

Temp Blank: Yes No
 Wet Ice: Yes No
 Thermometer ID: 1155

Correction Factor: 1.00

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code				Sample Comments
					Chloride E300	BTEX 8021	TPH Modified Ext	TPH TX1005	
MW1	So.1	8.24.20			X	X	X		
NEW1	So.1	8.24.20			X	X	X		
SWW1	So.1	8.24.20			X	X	X		
FL104'	So.1	8.24.20		4'	X	X	X		
FL204'	So.1	8.24.20		4'	X	X	X		
FL304'	So.1	8.24.20		4'	X	X	X		

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$15.00 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) <u>[Signature]</u>	Received by: (Signature) <u>[Signature]</u>	Date/Time <u>8/24/20</u>	Relinquished by: (Signature) <u>[Signature]</u>	Received by: (Signature) <u>[Signature]</u>	Date/Time <u>8/25/20</u>


01 MARR
 TRK# 9061 5134 8308
 TX-US LBB 79706
 TUE - 25 AUG 4:30P
 STANDARD OVERNIGHT

 (432) 704-5440
 MIDLAND TX 79706
 XENCO HOLD FOR PICKUP
 3600 S COUNTY RD
 TO: XENCO HOLD FOR PICKUP
 MAIL SERVICES ETC
 4008 N GRIMES
 HOBBBS, NM 88240
 UNITED STATES US
 ORIGIN ID: HOBB
 249UG20
 20 LB MAN
 CDD: 0103852/CAFE3313
 DIMS: 17X16X12 IN
 BILL RECEIPT
 20928 89817/LT/C3235995

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 08.25.2020 11.15.00 AM

Work Order #: 670837

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist

Comments

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel
Brianna Teel

Date: 08.26.2020

Checklist reviewed by: Jessica Kramer
Jessica Kramer

Date: 08.26.2020



Certificate of Analysis Summary 671116

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Cole State #10

Project Id: 11465
Contact: PM
Project Location: Lea County, NM

Date Received in Lab: Thu 08.27.2020 11:40
Report Date: 08.31.2020 17:14
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	671116-001	671116-002	671116-003	671116-004	671116-005	671116-006
	<i>Field Id:</i>	FL4 @4'	FL5@4'	FL6 @4'	SWW #2	NEW #2	FL7 @ 4'
	<i>Depth:</i>	4- ft	4- ft	4- ft			4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.25.2020 00:00	08.25.2020 00:00	08.25.2020 00:00	08.25.2020 00:00	08.25.2020 00:00	08.25.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.29.2020 14:30	08.29.2020 14:30	08.29.2020 14:30	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00
	<i>Analyzed:</i>	08.29.2020 22:36	08.29.2020 22:57	08.29.2020 23:17	08.29.2020 09:47	08.29.2020 10:08	08.29.2020 05:21
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00397 0.00397	<0.00398 0.00398	<0.00401 0.00401	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	08.27.2020 17:35	08.27.2020 17:35	08.27.2020 17:35	08.27.2020 17:35	08.27.2020 17:35	08.27.2020 17:35
	<i>Analyzed:</i>	08.28.2020 00:19	08.28.2020 00:24	08.28.2020 00:29	08.28.2020 00:35	08.28.2020 00:40	08.28.2020 00:45
	<i>Units/RL:</i>	mg/kg RL					
Chloride		93.6 25.1	1090 24.9	1420 24.9	9.19 5.04	72.5 25.0	864 25.1
TPH By SW8015 Mod	<i>Extracted:</i>	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00
	<i>Analyzed:</i>	08.29.2020 04:36	08.29.2020 04:56	08.29.2020 05:16	08.29.2020 05:36	08.29.2020 05:55	08.29.2020 06:15
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		1040 49.9	621 49.8	483 50.0	<50.0 50.0	<49.9 49.9	156 49.9
Motor Oil Range Hydrocarbons (MRO)		104 49.9	59.0 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Total TPH		1140 49.9	680 49.8	483 50.0	<50.0 50.0	<49.9 49.9	156 49.9

BRL - Below Reporting Limit

Jessica Kramer

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



Certificate of Analysis Summary 671116

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Cole State #10

Project Id: 11465
Contact: PM
Project Location: Lea County, NM

Date Received in Lab: Thu 08.27.2020 11:40
Report Date: 08.31.2020 17:14
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	671116-007	671116-008	671116-009	671116-010	671116-011	671116-012
	<i>Field Id:</i>	FL8 @ 4'	FL9 @ 4'	FL10 @ 4'	FL11 @ 4'	FL12 @ 4'	FL13 @ 4'
	<i>Depth:</i>	4- ft					
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.25.2020 00:00	08.25.2020 00:00	08.25.2020 00:00	08.26.2020 00:00	08.26.2020 00:00	08.26.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.28.2020 16:00	08.28.2020 16:00	08.29.2020 15:00	08.29.2020 15:00	08.29.2020 15:00	08.28.2020 16:00
	<i>Analyzed:</i>	08.29.2020 10:28	08.29.2020 10:49	08.30.2020 04:46	08.30.2020 05:07	08.30.2020 05:27	08.29.2020 11:10
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00397 0.00397	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401	<0.00396 0.00396
o-Xylene		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	08.27.2020 17:35	08.27.2020 17:50	08.27.2020 17:50	08.27.2020 17:50	08.27.2020 17:50	08.27.2020 17:50
	<i>Analyzed:</i>	08.28.2020 00:50	08.28.2020 01:22	08.28.2020 01:38	08.28.2020 01:43	08.28.2020 01:48	08.28.2020 01:54
	<i>Units/RL:</i>	mg/kg RL					
Chloride		1990 25.1	628 5.04	1690 24.9	1630 25.0	1720 50.1	1370 25.2
TPH By SW8015 Mod	<i>Extracted:</i>	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00
	<i>Analyzed:</i>	08.29.2020 06:35	08.29.2020 07:14	08.29.2020 07:34	08.29.2020 07:54	08.29.2020 08:14	08.29.2020 08:34
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		137 50.0	71.9 49.8	958 50.0	1250 49.9	1980 50.0	141 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	89.1 50.0	94.1 49.9	119 50.0	<49.9 49.9
Total TPH		137 50.0	71.9 49.8	1050 50.0	1340 49.9	2100 50.0	141 49.9

BRL - Below Reporting Limit

Jessica Kramer

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Certificate of Analysis Summary 671116

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Cole State #10

Project Id: 11465
Contact: PM
Project Location: Lea County, NM

Date Received in Lab: Thu 08.27.2020 11:40
Report Date: 08.31.2020 17:14
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	671116-013	671116-014	671116-015	671116-016	671116-017	
	<i>Field Id:</i>	FL14 @4'	FL15 @4'	SWW3	NEW3	SEW1	
	<i>Depth:</i>	4- ft	4- ft				
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	08.26.2020 00:00	08.26.2020 00:00	08.26.2020 00:00	08.26.2020 00:00	08.26.2020 00:00	
BTEX by EPA 8021B	<i>Extracted:</i>	08.29.2020 15:00	08.29.2020 15:00	08.29.2020 14:30	08.29.2020 14:30	08.29.2020 14:30	
	<i>Analyzed:</i>	08.30.2020 05:48	08.30.2020 06:09	08.29.2020 17:59	08.29.2020 18:20	08.29.2020 18:41	
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00198 0.00198	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199	
Toluene		<0.00198 0.00198	0.00469 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199	
Ethylbenzene		<0.00198 0.00198	0.0433 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199	
m,p-Xylenes		<0.00397 0.00397	0.0700 0.00398	<0.00402 0.00402	<0.00398 0.00398	<0.00398 0.00398	
o-Xylene		<0.00198 0.00198	0.0435 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199	
Total Xylenes		<0.00198 0.00198	0.114 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199	
Total BTEX		<0.00198 0.00198	0.161 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00199 0.00199	
Chloride by EPA 300	<i>Extracted:</i>	08.27.2020 17:50	08.27.2020 17:50	08.27.2020 17:50	08.27.2020 17:50	08.27.2020 17:50	
	<i>Analyzed:</i>	08.28.2020 02:09	08.28.2020 02:15	08.28.2020 08:35	08.28.2020 02:25	08.28.2020 02:30	
	<i>Units/RL:</i>	mg/kg RL					
Chloride		1310 24.9	1190 24.8	11.3 4.98	262 25.2	9.78 5.02	
TPH By SW8015 Mod	<i>Extracted:</i>	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00	08.28.2020 16:00	
	<i>Analyzed:</i>	08.29.2020 08:53	08.29.2020 09:13	08.29.2020 09:33	08.29.2020 09:52	08.29.2020 10:12	
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	69.5 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	
Diesel Range Organics (DRO)		300 49.9	1060 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	78.2 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	
Total TPH		300 49.9	1210 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	

BRL - Below Reporting Limit

Jessica Kramer

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

Analytical Report 671116

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Cole State #10

11465

08.31.2020

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

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



08.31.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **671116**

Cole State #10

Project Address: Lea 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) 671116. 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. 671116 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 671116

Etech Environmental & Safety Solution, Inc, Midland, TX

Cole State #10

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL4 @4'	S	08.25.2020 00:00	4 ft	671116-001
FL5@4'	S	08.25.2020 00:00	4 ft	671116-002
FL6 @4'	S	08.25.2020 00:00	4 ft	671116-003
SWW #2	S	08.25.2020 00:00	ft	671116-004
NEW #2	S	08.25.2020 00:00	ft	671116-005
FL7 @ 4'	S	08.25.2020 00:00	4 ft	671116-006
FL8 @ 4'	S	08.25.2020 00:00	4 ft	671116-007
FL9 @ 4'	S	08.25.2020 00:00	4 ft	671116-008
FL10 @ 4'	S	08.25.2020 00:00	4 ft	671116-009
FL11 @ 4'	S	08.26.2020 00:00	4 ft	671116-010
FL12 @ 4'	S	08.26.2020 00:00	4 ft	671116-011
FL13 @4'	S	08.26.2020 00:00	4 ft	671116-012
FL14 @4'	S	08.26.2020 00:00	4 ft	671116-013
FL15 @4'	S	08.26.2020 00:00	4 ft	671116-014
SWW3	S	08.26.2020 00:00	ft	671116-015
NEW3	S	08.26.2020 00:00	ft	671116-016
SEW1	S	08.26.2020 00:00	ft	671116-017

**CASE NARRATIVE***Client Name: Etech Environmental & Safety Solution, Inc**Project Name: Cole State #10*Project ID: 11465
Work Order Number(s): 671116Report Date: 08.31.2020
Date Received: 08.27.2020**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3135897 BTEX by EPA 8021B

Lab Sample ID 671116-006 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: 671116-004, -005, -006, -007, -008, -012.

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

Batch: LBA-3135908 BTEX by EPA 8021B

Lab Sample ID 671116-009 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 671116-009, -010, -011, -013, -014.

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



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL4 @4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-001 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:35 Basis: Wet Weight
 Seq Number: 3135777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	93.6	25.1	mg/kg	08.28.2020 00:19		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 04:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	1040	49.9	mg/kg	08.29.2020 04:36		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	104	49.9	mg/kg	08.29.2020 04:36		1
Total TPH	PHC635	1140	49.9	mg/kg	08.29.2020 04:36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	08.29.2020 04:36	
o-Terphenyl	84-15-1	119	%	70-130	08.29.2020 04:36	



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL4 @4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-001 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 14:30 Basis: Wet Weight
 Seq Number: 3135907

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.29.2020 22:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.29.2020 22:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.29.2020 22:36	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.29.2020 22:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.29.2020 22:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.29.2020 22:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.29.2020 22:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.29.2020 22:36	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.29.2020 22:36	



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX

Cole State #10

Sample Id: **FL5@4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-002 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:35 Basis: Wet Weight
 Seq Number: 3135777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1090	24.9	mg/kg	08.28.2020 00:24		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.29.2020 04:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	621	49.8	mg/kg	08.29.2020 04:56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	59.0	49.8	mg/kg	08.29.2020 04:56		1
Total TPH	PHC635	680	49.8	mg/kg	08.29.2020 04:56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	08.29.2020 04:56	
o-Terphenyl	84-15-1	112	%	70-130	08.29.2020 04:56	



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL5@4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-002 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 14:30 Basis: Wet Weight
 Seq Number: 3135907

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.29.2020 22:57	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.29.2020 22:57	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.29.2020 22:57	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.29.2020 22:57	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.29.2020 22:57	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.29.2020 22:57	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.29.2020 22:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	123	%	70-130	08.29.2020 22:57	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.29.2020 22:57	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL6 @4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-003 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:35 Basis: Wet Weight
 Seq Number: 3135777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1420	24.9	mg/kg	08.28.2020 00:29		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.29.2020 05:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	483	50.0	mg/kg	08.29.2020 05:16		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.29.2020 05:16	U	1
Total TPH	PHC635	483	50.0	mg/kg	08.29.2020 05:16		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	08.29.2020 05:16	
o-Terphenyl	84-15-1	110	%	70-130	08.29.2020 05:16	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL6 @4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-003 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 14:30 Basis: Wet Weight
 Seq Number: 3135907

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.29.2020 23:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.29.2020 23:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.29.2020 23:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.29.2020 23:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.29.2020 23:17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.29.2020 23:17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.29.2020 23:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	08.29.2020 23:17	
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.29.2020 23:17	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **SWW #2** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-004 Date Collected: 08.25.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:35 Basis: Wet Weight
 Seq Number: 3135777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.19	5.04	mg/kg	08.28.2020 00:35		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.29.2020 05:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.29.2020 05:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.29.2020 05:36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.29.2020 05:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	08.29.2020 05:36	
o-Terphenyl	84-15-1	104	%	70-130	08.29.2020 05:36	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **SWW #2** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-004 Date Collected: 08.25.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135897

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.29.2020 09:47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.29.2020 09:47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.29.2020 09:47	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.29.2020 09:47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.29.2020 09:47	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.29.2020 09:47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.29.2020 09:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.29.2020 09:47	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.29.2020 09:47	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **NEW #2** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-005 Date Collected: 08.25.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:35 Basis: Wet Weight
 Seq Number: 3135777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	72.5	25.0	mg/kg	08.28.2020 00:40		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 05:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.29.2020 05:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.29.2020 05:55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.29.2020 05:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-130	08.29.2020 05:55	
o-Terphenyl	84-15-1	90	%	70-130	08.29.2020 05:55	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **NEW #2** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-005 Date Collected: 08.25.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135897

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.29.2020 10:08	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.29.2020 10:08	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.29.2020 10:08	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.29.2020 10:08	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.29.2020 10:08	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.29.2020 10:08	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.29.2020 10:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.29.2020 10:08	
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.29.2020 10:08	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL7 @ 4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-006 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:35 Basis: Wet Weight
 Seq Number: 3135777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	864	25.1	mg/kg	08.28.2020 00:45		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 06:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	156	49.9	mg/kg	08.29.2020 06:15		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.29.2020 06:15	U	1
Total TPH	PHC635	156	49.9	mg/kg	08.29.2020 06:15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	08.29.2020 06:15	
o-Terphenyl	84-15-1	96	%	70-130	08.29.2020 06:15	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL7 @ 4'	Matrix: Soil	Date Received: 08.27.2020 11:40
Lab Sample Id: 671116-006	Date Collected: 08.25.2020 00:00	Sample Depth: 4 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5035A
Tech: AMF		% Moisture:
Analyst: AMF	Date Prep: 08.28.2020 16:00	Basis: Wet Weight
Seq Number: 3135897		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.29.2020 05:21	UX	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.29.2020 05:21	UX	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.29.2020 05:21	UX	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.29.2020 05:21	UX	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.29.2020 05:21	UX	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.29.2020 05:21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.29.2020 05:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.29.2020 05:21	
4-Bromofluorobenzene	460-00-4	116	%	70-130	08.29.2020 05:21	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL8 @ 4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-007 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:35 Basis: Wet Weight
 Seq Number: 3135777

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1990	25.1	mg/kg	08.28.2020 00:50		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.29.2020 06:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	137	50.0	mg/kg	08.29.2020 06:35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.29.2020 06:35	U	1
Total TPH	PHC635	137	50.0	mg/kg	08.29.2020 06:35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	08.29.2020 06:35	
o-Terphenyl	84-15-1	103	%	70-130	08.29.2020 06:35	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL8 @ 4'	Matrix: Soil	Date Received: 08.27.2020 11:40
Lab Sample Id: 671116-007	Date Collected: 08.25.2020 00:00	Sample Depth: 4 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5035A
Tech: AMF		% Moisture:
Analyst: AMF	Date Prep: 08.28.2020 16:00	Basis: Wet Weight
Seq Number: 3135897		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.29.2020 10:28	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.29.2020 10:28	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.29.2020 10:28	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.29.2020 10:28	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.29.2020 10:28	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.29.2020 10:28	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.29.2020 10:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.29.2020 10:28	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.29.2020 10:28	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL9 @ 4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-008 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:50 Basis: Wet Weight
 Seq Number: 3135788

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	628	5.04	mg/kg	08.28.2020 01:22		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.29.2020 07:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	71.9	49.8	mg/kg	08.29.2020 07:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.29.2020 07:14	U	1
Total TPH	PHC635	71.9	49.8	mg/kg	08.29.2020 07:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	08.29.2020 07:14	
o-Terphenyl	84-15-1	101	%	70-130	08.29.2020 07:14	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL9 @ 4'	Matrix: Soil	Date Received: 08.27.2020 11:40
Lab Sample Id: 671116-008	Date Collected: 08.25.2020 00:00	Sample Depth: 4 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5035A
Tech: AMF		% Moisture:
Analyst: AMF	Date Prep: 08.28.2020 16:00	Basis: Wet Weight
Seq Number: 3135897		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.29.2020 10:49	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.29.2020 10:49	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.29.2020 10:49	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.29.2020 10:49	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.29.2020 10:49	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.29.2020 10:49	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.29.2020 10:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.29.2020 10:49	
4-Bromofluorobenzene	460-00-4	117	%	70-130	08.29.2020 10:49	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL10 @ 4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-009 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:50 Basis: Wet Weight
 Seq Number: 3135788

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1690	24.9	mg/kg	08.28.2020 01:38		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.29.2020 07:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	958	50.0	mg/kg	08.29.2020 07:34		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	89.1	50.0	mg/kg	08.29.2020 07:34		1
Total TPH	PHC635	1050	50.0	mg/kg	08.29.2020 07:34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	08.29.2020 07:34	
o-Terphenyl	84-15-1	115	%	70-130	08.29.2020 07:34	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL10 @ 4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-009 Date Collected: 08.25.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 15:00 Basis: Wet Weight
 Seq Number: 3135908

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.30.2020 04:46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.30.2020 04:46	UX	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.30.2020 04:46	UX	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.30.2020 04:46	UX	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.30.2020 04:46	UX	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.30.2020 04:46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.30.2020 04:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.30.2020 04:46	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.30.2020 04:46	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL11 @ 4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-010 Date Collected: 08.26.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:50 Basis: Wet Weight
 Seq Number: 3135788

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1630	25.0	mg/kg	08.28.2020 01:43		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 07:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	1250	49.9	mg/kg	08.29.2020 07:54		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	94.1	49.9	mg/kg	08.29.2020 07:54		1
Total TPH	PHC635	1340	49.9	mg/kg	08.29.2020 07:54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	08.29.2020 07:54	
o-Terphenyl	84-15-1	127	%	70-130	08.29.2020 07:54	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL11 @ 4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-010 Date Collected: 08.26.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 15:00 Basis: Wet Weight
 Seq Number: 3135908

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.30.2020 05:07	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.30.2020 05:07	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.30.2020 05:07	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.30.2020 05:07	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.30.2020 05:07	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.30.2020 05:07	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.30.2020 05:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	08.30.2020 05:07	
4-Bromofluorobenzene	460-00-4	127	%	70-130	08.30.2020 05:07	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL12 @ 4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-011 Date Collected: 08.26.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:50 Basis: Wet Weight
 Seq Number: 3135788

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1720	50.1	mg/kg	08.28.2020 01:48		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.29.2020 08:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	1980	50.0	mg/kg	08.29.2020 08:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	119	50.0	mg/kg	08.29.2020 08:14		1
Total TPH	PHC635	2100	50.0	mg/kg	08.29.2020 08:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	08.29.2020 08:14	
o-Terphenyl	84-15-1	123	%	70-130	08.29.2020 08:14	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL12 @ 4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-011 Date Collected: 08.26.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 15:00 Basis: Wet Weight
 Seq Number: 3135908

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.30.2020 05:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.30.2020 05:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.30.2020 05:27	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.30.2020 05:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.30.2020 05:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.30.2020 05:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.30.2020 05:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.30.2020 05:27		
4-Bromofluorobenzene	460-00-4	128	%	70-130	08.30.2020 05:27		



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL13 @4'	Matrix: Soil	Date Received: 08.27.2020 11:40
Lab Sample Id: 671116-012	Date Collected: 08.26.2020 00:00	Sample Depth: 4 ft
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: SPC		% Moisture:
Analyst: SPC	Date Prep: 08.27.2020 17:50	Basis: Wet Weight
Seq Number: 3135788		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1370	25.2	mg/kg	08.28.2020 01:54		5

Analytical Method: TPH By SW8015 Mod		Prep Method: SW8015P
Tech: DVM		% Moisture:
Analyst: ARM	Date Prep: 08.28.2020 16:00	Basis: Wet Weight
Seq Number: 3135950		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 08:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	141	49.9	mg/kg	08.29.2020 08:34		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.29.2020 08:34	U	1
Total TPH	PHC635	141	49.9	mg/kg	08.29.2020 08:34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	08.29.2020 08:34	
o-Terphenyl	84-15-1	100	%	70-130	08.29.2020 08:34	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL13 @4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-012 Date Collected: 08.26.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135897

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.29.2020 11:10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.29.2020 11:10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.29.2020 11:10	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.29.2020 11:10	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.29.2020 11:10	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.29.2020 11:10	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.29.2020 11:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.29.2020 11:10	
4-Bromofluorobenzene	460-00-4	112	%	70-130	08.29.2020 11:10	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL14 @4'	Matrix: Soil	Date Received: 08.27.2020 11:40
Lab Sample Id: 671116-013	Date Collected: 08.26.2020 00:00	Sample Depth: 4 ft
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: SPC		% Moisture:
Analyst: SPC	Date Prep: 08.27.2020 17:50	Basis: Wet Weight
Seq Number: 3135788		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1310	24.9	mg/kg	08.28.2020 02:09		5

Analytical Method: TPH By SW8015 Mod		Prep Method: SW8015P
Tech: DVM		% Moisture:
Analyst: ARM	Date Prep: 08.28.2020 16:00	Basis: Wet Weight
Seq Number: 3135950		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 08:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	300	49.9	mg/kg	08.29.2020 08:53		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.29.2020 08:53	U	1
Total TPH	PHC635	300	49.9	mg/kg	08.29.2020 08:53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	08.29.2020 08:53	
o-Terphenyl	84-15-1	107	%	70-130	08.29.2020 08:53	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL14 @4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-013 Date Collected: 08.26.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 15:00 Basis: Wet Weight
 Seq Number: 3135908

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.30.2020 05:48	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.30.2020 05:48	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.30.2020 05:48	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.30.2020 05:48	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.30.2020 05:48	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.30.2020 05:48	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.30.2020 05:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.30.2020 05:48	
4-Bromofluorobenzene	460-00-4	113	%	70-130	08.30.2020 05:48	



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Etech Environmental & Safety Solution, Inc, Midland, TX
 Cole State #10

Sample Id: **FL15 @4'** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-014 Date Collected: 08.26.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:50 Basis: Wet Weight
 Seq Number: 3135788

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1190	24.8	mg/kg	08.28.2020 02:15		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	69.5	50.0	mg/kg	08.29.2020 09:13		1
Diesel Range Organics (DRO)	C10C28DRO	1060	50.0	mg/kg	08.29.2020 09:13		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	78.2	50.0	mg/kg	08.29.2020 09:13		1
Total TPH	PHC635	1210	50.0	mg/kg	08.29.2020 09:13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	08.29.2020 09:13	
o-Terphenyl	84-15-1	116	%	70-130	08.29.2020 09:13	



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Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL15 @4'	Matrix: Soil	Date Received: 08.27.2020 11:40
Lab Sample Id: 671116-014	Date Collected: 08.26.2020 00:00	Sample Depth: 4 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5035A
Tech: AMF		% Moisture:
Analyst: AMF	Date Prep: 08.29.2020 15:00	Basis: Wet Weight
Seq Number: 3135908		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.30.2020 06:09	U	1
Toluene	108-88-3	0.00469	0.00199	mg/kg	08.30.2020 06:09		1
Ethylbenzene	100-41-4	0.0433	0.00199	mg/kg	08.30.2020 06:09		1
m,p-Xylenes	179601-23-1	0.0700	0.00398	mg/kg	08.30.2020 06:09		1
o-Xylene	95-47-6	0.0435	0.00199	mg/kg	08.30.2020 06:09		1
Total Xylenes	1330-20-7	0.114	0.00199	mg/kg	08.30.2020 06:09		1
Total BTEX		0.161	0.00199	mg/kg	08.30.2020 06:09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.30.2020 06:09	
4-Bromofluorobenzene	460-00-4	116	%	70-130	08.30.2020 06:09	



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **SWW3** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-015 Date Collected: 08.26.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:50 Basis: Wet Weight
 Seq Number: 3135788

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.3	4.98	mg/kg	08.28.2020 08:35		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.29.2020 09:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.29.2020 09:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.29.2020 09:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.29.2020 09:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	08.29.2020 09:33	
o-Terphenyl	84-15-1	86	%	70-130	08.29.2020 09:33	



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **SWW3** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-015 Date Collected: 08.26.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 14:30 Basis: Wet Weight
 Seq Number: 3135907

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.29.2020 17:59	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.29.2020 17:59	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.29.2020 17:59	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.29.2020 17:59	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.29.2020 17:59	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.29.2020 17:59	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.29.2020 17:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	08.29.2020 17:59	
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.29.2020 17:59	



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **NEW3** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-016 Date Collected: 08.26.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:50 Basis: Wet Weight
 Seq Number: 3135788

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	262	25.2	mg/kg	08.28.2020 02:25		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 09:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.29.2020 09:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.29.2020 09:52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.29.2020 09:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	08.29.2020 09:52	
o-Terphenyl	84-15-1	90	%	70-130	08.29.2020 09:52	



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **NEW3** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-016 Date Collected: 08.26.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 14:30 Basis: Wet Weight
 Seq Number: 3135907

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.29.2020 18:20	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.29.2020 18:20	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.29.2020 18:20	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.29.2020 18:20	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.29.2020 18:20	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.29.2020 18:20	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.29.2020 18:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.29.2020 18:20	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.29.2020 18:20	



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **SEW1** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-017 Date Collected: 08.26.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.27.2020 17:50 Basis: Wet Weight
 Seq Number: 3135788

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.78	5.02	mg/kg	08.28.2020 02:30		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.28.2020 16:00 Basis: Wet Weight
 Seq Number: 3135950

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.29.2020 10:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.29.2020 10:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.29.2020 10:12	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.29.2020 10:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	08.29.2020 10:12	
o-Terphenyl	84-15-1	92	%	70-130	08.29.2020 10:12	



Certificate of Analytical Results 671116

Etech Environmental & Safety Solution, Inc, Midland, TX

Cole State #10

Sample Id: **SEW1** Matrix: Soil Date Received: 08.27.2020 11:40
 Lab Sample Id: 671116-017 Date Collected: 08.26.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.29.2020 14:30 Basis: Wet Weight
 Seq Number: 3135907

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.29.2020 18:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.29.2020 18:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.29.2020 18:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.29.2020 18:41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.29.2020 18:41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.29.2020 18:41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.29.2020 18:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.29.2020 18:41	
4-Bromofluorobenzene	460-00-4	121	%	70-130	08.29.2020 18:41	



Etech Environmental & Safety Solution, Inc
Cole State #10

Analytical Method: Chloride by EPA 300

Seq Number: 3135777

MB Sample Id: 7710321-1-BLK

Matrix: Solid

LCS Sample Id: 7710321-1-BKS

Prep Method: E300P

Date Prep: 08.27.2020

LCSD Sample Id: 7710321-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	257	103	250	100	90-110	3	20	mg/kg	08.27.2020 22:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3135788

MB Sample Id: 7710323-1-BLK

Matrix: Solid

LCS Sample Id: 7710323-1-BKS

Prep Method: E300P

Date Prep: 08.27.2020

LCSD Sample Id: 7710323-1-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	250	100	248	99	90-110	1	20	mg/kg	08.28.2020 01:11	

Analytical Method: Chloride by EPA 300

Seq Number: 3135777

Parent Sample Id: 671070-005

Matrix: Soil

MS Sample Id: 671070-005 S

Prep Method: E300P

Date Prep: 08.27.2020

MSD Sample Id: 671070-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5070	2490	7730	107	7740	107	90-110	0	20	mg/kg	08.27.2020 22:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3135777

Parent Sample Id: 671103-002

Matrix: Soil

MS Sample Id: 671103-002 S

Prep Method: E300P

Date Prep: 08.27.2020

MSD Sample Id: 671103-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8190	2480	10900	109	10900	109	90-110	0	20	mg/kg	08.28.2020 11:23	

Analytical Method: Chloride by EPA 300

Seq Number: 3135788

Parent Sample Id: 671116-008

Matrix: Soil

MS Sample Id: 671116-008 S

Prep Method: E300P

Date Prep: 08.27.2020

MSD Sample Id: 671116-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	628	252	855	90	857	91	90-110	0	20	mg/kg	08.28.2020 01:27	

Analytical Method: Chloride by EPA 300

Seq Number: 3135788

Parent Sample Id: 671123-001

Matrix: Soil

MS Sample Id: 671123-001 S

Prep Method: E300P

Date Prep: 08.27.2020

MSD Sample Id: 671123-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3450	1250	4770	106	4780	106	90-110	0	20	mg/kg	08.28.2020 02:41	

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
Cole State #10

Analytical Method: TPH By SW8015 Mod

Seq Number: 3135950

MB Sample Id: 7710460-1-BLK

Matrix: Solid

LCS Sample Id: 7710460-1-BKS

Prep Method: SW8015P

Date Prep: 08.28.2020

LCSD Sample Id: 7710460-1-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	1100	110	1060	106	70-130	4	20	mg/kg	08.29.2020 02:18	
Diesel Range Organics (DRO)	<50.0	1000	1130	113	1110	111	70-130	2	20	mg/kg	08.29.2020 02:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		121		118		70-130	%	08.29.2020 02:18
o-Terphenyl	119		124		117		70-130	%	08.29.2020 02:18

Analytical Method: TPH By SW8015 Mod

Seq Number: 3135950

MB Sample Id: 7710460-1-BLK

Matrix: Solid

MB Sample Id: 7710460-1-BLK

Prep Method: SW8015P

Date Prep: 08.28.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.29.2020 01:58	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3135950

Parent Sample Id: 671123-001

Matrix: Soil

MS Sample Id: 671123-001 S

Prep Method: SW8015P

Date Prep: 08.28.2020

MSD Sample Id: 671123-001 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	884	89	901	90	70-130	2	20	mg/kg	08.29.2020 03:17	
Diesel Range Organics (DRO)	<49.9	997	965	97	980	98	70-130	2	20	mg/kg	08.29.2020 03:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		109		70-130	%	08.29.2020 03:17
o-Terphenyl	109		111		70-130	%	08.29.2020 03:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135897

MB Sample Id: 7710439-1-BLK

Matrix: Solid

LCS Sample Id: 7710439-1-BKS

Prep Method: SW5035A

Date Prep: 08.28.2020

LCSD Sample Id: 7710439-1-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	0.0918	92	0.0864	86	70-130	6	35	mg/kg	08.29.2020 03:01	
Toluene	<0.00200	0.100	0.0807	81	0.0767	77	70-130	5	35	mg/kg	08.29.2020 03:01	
Ethylbenzene	<0.00200	0.100	0.0803	80	0.0757	76	70-130	6	35	mg/kg	08.29.2020 03:01	
m,p-Xylenes	<0.00400	0.200	0.158	79	0.149	75	70-130	6	35	mg/kg	08.29.2020 03:01	
o-Xylene	<0.00200	0.100	0.0822	82	0.0778	78	70-130	6	35	mg/kg	08.29.2020 03:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		102		100		70-130	%	08.29.2020 03:01
4-Bromofluorobenzene	102		102		99		70-130	%	08.29.2020 03:01

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
Cole State #10

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135907

MB Sample Id: 7710446-1-BLK

Matrix: Solid

LCS Sample Id: 7710446-1-BKS

Prep Method: SW5035A

Date Prep: 08.29.2020

LCSD Sample Id: 7710446-1-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	0.102	102	0.100	100	70-130	2	35	mg/kg	08.29.2020 15:01	
Toluene	<0.00200	0.100	0.0887	89	0.0920	92	70-130	4	35	mg/kg	08.29.2020 15:01	
Ethylbenzene	<0.00200	0.100	0.0881	88	0.0951	95	70-130	8	35	mg/kg	08.29.2020 15:01	
m,p-Xylenes	<0.00400	0.200	0.172	86	0.190	95	70-130	10	35	mg/kg	08.29.2020 15:01	
o-Xylene	<0.00200	0.100	0.0862	86	0.0947	95	70-130	9	35	mg/kg	08.29.2020 15:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		102		100		70-130	%	08.29.2020 15:01
4-Bromofluorobenzene	88		96		109		70-130	%	08.29.2020 15:01

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135908

MB Sample Id: 7710447-1-BLK

Matrix: Solid

LCS Sample Id: 7710447-1-BKS

Prep Method: SW5035A

Date Prep: 08.29.2020

LCSD Sample Id: 7710447-1-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	0.0899	90	0.0891	89	70-130	1	35	mg/kg	08.30.2020 02:24	
Toluene	<0.00200	0.100	0.0845	85	0.0836	84	70-130	1	35	mg/kg	08.30.2020 02:24	
Ethylbenzene	<0.00200	0.100	0.0874	87	0.0867	87	70-130	1	35	mg/kg	08.30.2020 02:24	
m,p-Xylenes	<0.00400	0.200	0.177	89	0.177	89	70-130	0	35	mg/kg	08.30.2020 02:24	
o-Xylene	<0.00200	0.100	0.0913	91	0.0915	92	70-130	0	35	mg/kg	08.30.2020 02:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		100		99		70-130	%	08.30.2020 02:24
4-Bromofluorobenzene	101		117		118		70-130	%	08.30.2020 02:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135897

Parent Sample Id: 671116-006

Matrix: Soil

MS Sample Id: 671116-006 S

Prep Method: SW5035A

Date Prep: 08.28.2020

MSD Sample Id: 671116-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0625	63	0.0637	64	70-130	2	35	mg/kg	08.29.2020 03:42	X
Toluene	<0.00198	0.0992	0.0541	55	0.0545	55	70-130	1	35	mg/kg	08.29.2020 03:42	X
Ethylbenzene	<0.00198	0.0992	0.0493	50	0.0490	49	70-130	1	35	mg/kg	08.29.2020 03:42	X
m,p-Xylenes	<0.00397	0.198	0.0947	48	0.0876	44	70-130	8	35	mg/kg	08.29.2020 03:42	X
o-Xylene	<0.00198	0.0992	0.0528	53	0.0527	53	70-130	0	35	mg/kg	08.29.2020 03:42	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		101		70-130	%	08.29.2020 03:42
4-Bromofluorobenzene	103		101		70-130	%	08.29.2020 03:42

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
Cole State #10

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135907

Parent Sample Id: 671095-004

Matrix: Soil

MS Sample Id: 671095-004 S

Prep Method: SW5035A

Date Prep: 08.29.2020

MSD Sample Id: 671095-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0577	58	0.0603	61	70-130	4	35	mg/kg	08.29.2020 15:43	X
Toluene	<0.00200	0.0998	0.0514	52	0.0551	55	70-130	7	35	mg/kg	08.29.2020 15:43	X
Ethylbenzene	<0.00200	0.0998	0.0502	50	0.0551	55	70-130	9	35	mg/kg	08.29.2020 15:43	X
m,p-Xylenes	<0.00399	0.200	0.103	52	0.111	56	70-130	7	35	mg/kg	08.29.2020 15:43	X
o-Xylene	<0.00200	0.0998	0.0532	53	0.0576	58	70-130	8	35	mg/kg	08.29.2020 15:43	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		102		70-130	%	08.29.2020 15:43
4-Bromofluorobenzene	107		112		70-130	%	08.29.2020 15:43

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135908

Parent Sample Id: 671116-009

Matrix: Soil

MS Sample Id: 671116-009 S

Prep Method: SW5035A

Date Prep: 08.29.2020

MSD Sample Id: 671116-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0768	77	0.0729	73	70-130	5	35	mg/kg	08.30.2020 03:05	
Toluene	<0.00198	0.0992	0.0602	61	0.0598	60	70-130	1	35	mg/kg	08.30.2020 03:05	X
Ethylbenzene	<0.00198	0.0992	0.0419	42	0.0448	45	70-130	7	35	mg/kg	08.30.2020 03:05	X
m,p-Xylenes	<0.00397	0.198	0.0696	35	0.0837	42	70-130	18	35	mg/kg	08.30.2020 03:05	X
o-Xylene	<0.00198	0.0992	0.0528	53	0.0541	54	70-130	2	35	mg/kg	08.30.2020 03:05	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		102		70-130	%	08.30.2020 03:05
4-Bromofluorobenzene	119		116		70-130	%	08.30.2020 03:05

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: 08.27.2020 11.40.00 AM

Work Order #: 671116

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : IR-8

Sample Receipt Checklist

Comments

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Brianna Teel
Brianna Teel

Date: 08.27.2020

Checklist reviewed by:

Jessica Kramer
Jessica Kramer

Date: 08.28.2020



Certificate of Analysis Summary 672125

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Cole State #10

Project Id: 11465
Contact: PM
Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.09.2020 12:50
Report Date: 09.10.2020 11:19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672125-001		672125-002		672125-003		672125-004		672125-005		672125-006	
	<i>Field Id:</i>	NWW1B		SWW1B		FL3 @5'		FL4 @5'		FL11 @5'		FL12 @5'	
	<i>Depth:</i>	SOIL											
	<i>Sampled:</i>	09.09.2020 00:00		09.09.2020 00:00		09.09.2020 00:00		09.09.2020 00:00		09.09.2020 00:00		09.09.2020 00:00	
TPH by SW8015 Mod	<i>Extracted:</i>	09.09.2020 14:10		09.09.2020 14:10		09.09.2020 14:10		09.09.2020 14:10		09.09.2020 14:10		09.09.2020 14:10	
	<i>Analyzed:</i>	09.09.2020 14:35		09.09.2020 14:54		09.09.2020 15:14		09.09.2020 15:34		09.09.2020 15:54		09.09.2020 16:15	
	<i>Units/RL:</i>	mg/kg	RL										
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<49.8	49.8	<50.2	50.2	<49.8	49.8	<49.9	49.9	<50.2	50.2
Diesel Range Organics (DRO)		<49.9	49.9	<49.8	49.8	<50.2	50.2	<49.8	49.8	<49.9	49.9	<50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<49.8	49.8	<50.2	50.2	<49.8	49.8	<49.9	49.9	<50.2	50.2
Total TPH		<49.9	49.9	<49.8	49.8	<50.2	50.2	<49.8	49.8	<49.9	49.9	<50.2	50.2

BRL - Below Reporting Limit

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

Jessica Kramer



Certificate of Analysis Summary 672125

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Cole State #10

Project Id: 11465
Contact: PM
Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.09.2020 12:50
Report Date: 09.10.2020 11:19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	Lab Id:	672125-007				
	Field Id:	FL15 @5'				
	Depth:	5- ft				
	Matrix:	SOIL				
	Sampled:	09.09.2020 00:00				
TPH by SW8015 Mod	Extracted:	09.09.2020 14:10				
	Analyzed:	09.09.2020 16:35				
	Units/RL:	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0				
Diesel Range Organics (DRO)		<50.0 50.0				
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0				
Total TPH		<50.0 50.0				

BRL - Below Reporting Limit

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

Jessica Kramer



Analytical Report 672125

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Cole State #10

11465

09.10.2020

Collected By: Client

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

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

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

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



09.10.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **672125**

Cole State #10

Project Address: Lea County, New Mexico

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) 672125. 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. 672125 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,

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 672125

Etech Environmental & Safety Solution, Inc, Midland, TX

Cole State #10

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NWW1B	S	09.09.2020 00:00		672125-001
SWW1B	S	09.09.2020 00:00		672125-002
FL3 @5'	S	09.09.2020 00:00	5 ft	672125-003
FL4 @5'	S	09.09.2020 00:00	5 ft	672125-004
FL11 @5'	S	09.09.2020 00:00	5 ft	672125-005
FL12 @5'	S	09.09.2020 00:00	5 ft	672125-006
FL15 @5'	S	09.09.2020 00:00	5 ft	672125-007



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Cole State #10

Project ID: 11465
Work Order Number(s): 672125

Report Date: 09.10.2020
Date Received: 09.09.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 672125

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **NWW1B** Matrix: Soil Date Received: 09.09.2020 12:50
 Lab Sample Id: 672125-001 Date Collected: 09.09.2020 00:00
 Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.09.2020 14:10 Basis: Wet Weight
 Seq Number: 3136684

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.09.2020 14:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.09.2020 14:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.09.2020 14:35	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.09.2020 14:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	09.09.2020 14:35	
o-Terphenyl	84-15-1	118	%	70-135	09.09.2020 14:35	



Certificate of Analytical Results 672125

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **SWW1B** Matrix: Soil Date Received: 09.09.2020 12:50
 Lab Sample Id: 672125-002 Date Collected: 09.09.2020 00:00
 Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.09.2020 14:10 Basis: Wet Weight
 Seq Number: 3136684

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.09.2020 14:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.09.2020 14:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.09.2020 14:54	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.09.2020 14:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	09.09.2020 14:54	
o-Terphenyl	84-15-1	122	%	70-135	09.09.2020 14:54	



Certificate of Analytical Results 672125

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL3 @5'	Matrix: Soil	Date Received: 09.09.2020 12:50
Lab Sample Id: 672125-003	Date Collected: 09.09.2020 00:00	Sample Depth: 5 ft
Analytical Method: TPH by SW8015 Mod		Prep Method: SW8015P
Tech: DTH		% Moisture:
Analyst: DTH	Date Prep: 09.09.2020 14:10	Basis: Wet Weight
Seq Number: 3136684		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.09.2020 15:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.09.2020 15:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.09.2020 15:14	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.09.2020 15:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	09.09.2020 15:14	
o-Terphenyl	84-15-1	116	%	70-135	09.09.2020 15:14	



Certificate of Analytical Results 672125

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL4 @5'	Matrix: Soil	Date Received: 09.09.2020 12:50
Lab Sample Id: 672125-004	Date Collected: 09.09.2020 00:00	Sample Depth: 5 ft
Analytical Method: TPH by SW8015 Mod		Prep Method: SW8015P
Tech: DTH		% Moisture:
Analyst: DTH	Date Prep: 09.09.2020 14:10	Basis: Wet Weight
Seq Number: 3136684		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.09.2020 15:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.09.2020 15:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.09.2020 15:34	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.09.2020 15:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	09.09.2020 15:34	
o-Terphenyl	84-15-1	115	%	70-135	09.09.2020 15:34	



Certificate of Analytical Results 672125

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL11 @5'	Matrix: Soil	Date Received: 09.09.2020 12:50
Lab Sample Id: 672125-005	Date Collected: 09.09.2020 00:00	Sample Depth: 5 ft
Analytical Method: TPH by SW8015 Mod		Prep Method: SW8015P
Tech: DTH		% Moisture:
Analyst: DTH	Date Prep: 09.09.2020 14:10	Basis: Wet Weight
Seq Number: 3136684		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.09.2020 15:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.09.2020 15:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.09.2020 15:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.09.2020 15:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	09.09.2020 15:54	
o-Terphenyl	84-15-1	114	%	70-135	09.09.2020 15:54	



Certificate of Analytical Results 672125

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: **FL12 @5'** Matrix: Soil Date Received: 09.09.2020 12:50
 Lab Sample Id: 672125-006 Date Collected: 09.09.2020 00:00 Sample Depth: 5 ft
 Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.09.2020 14:10 Basis: Wet Weight
 Seq Number: 3136684

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.09.2020 16:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.09.2020 16:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.09.2020 16:15	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.09.2020 16:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	09.09.2020 16:15	
o-Terphenyl	84-15-1	113	%	70-135	09.09.2020 16:15	



Certificate of Analytical Results 672125

Etech Environmental & Safety Solution, Inc, Midland, TX Cole State #10

Sample Id: FL15 @5'	Matrix: Soil	Date Received: 09.09.2020 12:50
Lab Sample Id: 672125-007	Date Collected: 09.09.2020 00:00	Sample Depth: 5 ft
Analytical Method: TPH by SW8015 Mod		Prep Method: SW8015P
Tech: DTH		% Moisture:
Analyst: DTH	Date Prep: 09.09.2020 14:10	Basis: Wet Weight
Seq Number: 3136684		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.09.2020 16:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.09.2020 16:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.09.2020 16:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.09.2020 16:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	110	%	70-135	09.09.2020 16:35		
o-Terphenyl	84-15-1	115	%	70-135	09.09.2020 16:35		



Etech Environmental & Safety Solution, Inc
Cole State #10

Analytical Method: TPH by SW8015 Mod

Seq Number: 3136684

MB Sample Id: 7711004-1-BLK

Matrix: Solid

LCS Sample Id: 7711004-1-BKS

Prep Method: SW8015P

Date Prep: 09.09.2020

LCSD Sample Id: 7711004-1-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	898	90	860	86	70-135	4	35	mg/kg	09.09.2020 10:12	
Diesel Range Organics (DRO)	<50.0	1000	1010	101	973	97	70-135	4	35	mg/kg	09.09.2020 10:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		122		115		70-135	%	09.09.2020 10:12
o-Terphenyl	101		117		112		70-135	%	09.09.2020 10:12

Analytical Method: TPH by SW8015 Mod

Seq Number: 3136684

MB Sample Id: 7711004-1-BLK

Matrix: Solid

Prep Method: SW8015P

Date Prep: 09.09.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.09.2020 09:51	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3136684

Parent Sample Id: 672074-001

Matrix: Soil

MS Sample Id: 672074-001 S

Prep Method: SW8015P

Date Prep: 09.09.2020

MSD Sample Id: 672074-001 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)	<50.1	1000	899	90	897	90	70-135	0	35	mg/kg	09.09.2020 12:11	
Diesel Range Organics (DRO)	<50.1	1000	1030	103	997	100	70-135	3	35	mg/kg	09.09.2020 12:11	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	131		127		70-135	%	09.09.2020 12:11
o-Terphenyl	127		133		70-135	%	09.09.2020 12:11

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: 09.09.2020 12.50.00 PM

Work Order #: 672125

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : T_NM_007

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 09.09.2020

Checklist reviewed by: Jessica Kramer Date: 09.10.2020



Certificate of Analysis Summary 672280

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Cole Stute #10

Project Id: 11465
Contact: PM
Project Location: Lea County, New Mexico

Date Received in Lab: Thu 09.10.2020 15:28
Report Date: 09.11.2020 10:57
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672280-001	672280-002	672280-003	672280-004	672280-005	672280-006
	<i>Field Id:</i>	FL 16 @ 5'	FL 17 @ 5'	FL 18 @ 5'	FL 19 @ 5'	FL 20 @ 5'	SWW 4
	<i>Depth:</i>	5- ft					
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.10.2020 00:00	09.10.2020 00:00	09.10.2020 00:00	09.10.2020 00:00	09.10.2020 00:00	09.10.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	09.10.2020 16:37	09.10.2020 16:37	09.10.2020 16:37	09.10.2020 16:37	09.10.2020 16:37	09.10.2020 16:37
	<i>Analyzed:</i>	09.11.2020 01:05	09.11.2020 01:27	09.11.2020 01:50	09.11.2020 02:12	09.11.2020 02:34	09.11.2020 02:57
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Toluene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Ethylbenzene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
m,p-Xylenes		<0.00403 0.00403	<0.00398 0.00398	<0.00400 0.00400	<0.00402 0.00402	<0.00402 0.00402	<0.00402 0.00402
o-Xylene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Total Xylenes		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Total BTEX		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Inorganic Anions by EPA 300	<i>Extracted:</i>	09.10.2020 16:54	09.10.2020 16:54	09.10.2020 16:54	09.10.2020 16:54	09.10.2020 16:54	09.10.2020 16:54
	<i>Analyzed:</i>	09.10.2020 17:17	09.10.2020 17:33	09.10.2020 17:38	09.10.2020 17:44	09.10.2020 17:49	09.10.2020 18:06
	<i>Units/RL:</i>	mg/kg RL					
Chloride		241 10.0	255 10.0	245 10.0	254 9.96	137 10.1	97.8 10.1
TPH by SW8015 Mod	<i>Extracted:</i>	09.10.2020 15:30	09.10.2020 15:30	09.10.2020 15:30	09.10.2020 15:30	09.10.2020 16:30	09.10.2020 16:30
	<i>Analyzed:</i>	09.10.2020 18:30	09.10.2020 18:50	09.10.2020 19:10	09.10.2020 19:31	09.10.2020 21:11	09.10.2020 22:11
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.0 50.0	<50.0 50.0
Total TPH		<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.3 50.3	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

Jessica Kramer

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



Certificate of Analysis Summary 672280

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Cole Stute #10

Project Id: 11465
Contact: PM
Project Location: Lea County, New Mexico

Date Received in Lab: Thu 09.10.2020 15:28
Report Date: 09.11.2020 10:57
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	672280-007				
	Field Id:	NEW 4				
	Depth:					
	Matrix:	SOIL				
	Sampled:	09.10.2020 00:00				
BTEX by EPA 8021B	Extracted:	09.10.2020 16:37				
	Analyzed:	09.11.2020 03:19				
	Units/RL:	mg/kg RL				
Benzene		<0.00200 0.00200				
Toluene		<0.00200 0.00200				
Ethylbenzene		<0.00200 0.00200				
m,p-Xylenes		<0.00400 0.00400				
o-Xylene		<0.00200 0.00200				
Total Xylenes		<0.00200 0.00200				
Total BTEX		<0.00200 0.00200				
Inorganic Anions by EPA 300	Extracted:	09.10.2020 16:54				
	Analyzed:	09.10.2020 18:11				
	Units/RL:	mg/kg RL				
Chloride		10.1 10.1				
TPH by SW8015 Mod	Extracted:	09.10.2020 16:30				
	Analyzed:	09.10.2020 22:32				
	Units/RL:	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3				
Diesel Range Organics (DRO)		<50.3 50.3				
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3				
Total TPH		<50.3 50.3				

BRL - Below Reporting Limit

Jessica Kramer

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



Analytical Report 672280

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Cole Stute #10

11465

09.11.2020

Collected By: Client

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

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

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

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



09.11.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **672280**

Cole Stute #10

Project Address: Lea County, New Mexico

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) 672280. 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. 672280 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 672280

Etech Environmental & Safety Solution, Inc, Midland, TX

Cole Stute #10

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FL 16 @ 5'	S	09.10.2020 00:00	5 ft	672280-001
FL 17 @ 5'	S	09.10.2020 00:00	5 ft	672280-002
FL 18 @ 5'	S	09.10.2020 00:00	5 ft	672280-003
FL 19 @ 5'	S	09.10.2020 00:00	5 ft	672280-004
FL 20 @ 5'	S	09.10.2020 00:00	5 ft	672280-005
SWW 4	S	09.10.2020 00:00		672280-006
NEW 4	S	09.10.2020 00:00		672280-007



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Cole Stute #10

Project ID: 11465
Work Order Number(s): 672280

Report Date: 09.11.2020
Date Received: 09.10.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **FL 16 @ 5'** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-001 Date Collected: 09.10.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:54 Basis: Wet Weight
 Seq Number: 3136852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	241	10.0	mg/kg	09.10.2020 17:17		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.10.2020 15:30 Basis: Wet Weight
 Seq Number: 3136854

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.10.2020 18:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.10.2020 18:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.10.2020 18:30	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.10.2020 18:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	09.10.2020 18:30	
o-Terphenyl	84-15-1	121	%	70-135	09.10.2020 18:30	



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **FL 16 @ 5'** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-001 Date Collected: 09.10.2020 00:00 Sample Depth: 5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:37 Basis: Wet Weight
 Seq Number: 3136847

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.11.2020 01:05	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.11.2020 01:05	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.11.2020 01:05	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.11.2020 01:05	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.11.2020 01:05	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.11.2020 01:05	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.11.2020 01:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	09.11.2020 01:05		
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.11.2020 01:05		



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **FL 17 @ 5'** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-002 Date Collected: 09.10.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:54 Basis: Wet Weight
 Seq Number: 3136852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	255	10.0	mg/kg	09.10.2020 17:33		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.10.2020 15:30 Basis: Wet Weight
 Seq Number: 3136854

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.10.2020 18:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.10.2020 18:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.10.2020 18:50	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.10.2020 18:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	09.10.2020 18:50	
o-Terphenyl	84-15-1	112	%	70-135	09.10.2020 18:50	



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: FL 17 @ 5'	Matrix: Soil	Date Received: 09.10.2020 15:28
Lab Sample Id: 672280-002	Date Collected: 09.10.2020 00:00	Sample Depth: 5 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5035A
Tech: MAB		% Moisture:
Analyst: MAB	Date Prep: 09.10.2020 16:37	Basis: Wet Weight
Seq Number: 3136847		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.11.2020 01:27	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.11.2020 01:27	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.11.2020 01:27	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.11.2020 01:27	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.11.2020 01:27	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.11.2020 01:27	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.11.2020 01:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.11.2020 01:27		
4-Bromofluorobenzene	460-00-4	91	%	70-130	09.11.2020 01:27		



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **FL 18 @ 5'** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-003 Date Collected: 09.10.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:54 Basis: Wet Weight
 Seq Number: 3136852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	245	10.0	mg/kg	09.10.2020 17:38		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.10.2020 15:30 Basis: Wet Weight
 Seq Number: 3136854

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	09.10.2020 19:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	09.10.2020 19:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	09.10.2020 19:10	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	09.10.2020 19:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	09.10.2020 19:10	
o-Terphenyl	84-15-1	115	%	70-135	09.10.2020 19:10	



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: FL 18 @ 5'	Matrix: Soil	Date Received: 09.10.2020 15:28
Lab Sample Id: 672280-003	Date Collected: 09.10.2020 00:00	Sample Depth: 5 ft
Analytical Method: BTEX by EPA 8021B		Prep Method: SW5035A
Tech: MAB		% Moisture:
Analyst: MAB	Date Prep: 09.10.2020 16:37	Basis: Wet Weight
Seq Number: 3136847		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.11.2020 01:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.11.2020 01:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.11.2020 01:50	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.11.2020 01:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.11.2020 01:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.11.2020 01:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.11.2020 01:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.11.2020 01:50		
4-Bromofluorobenzene	460-00-4	94	%	70-130	09.11.2020 01:50		



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **FL 19 @ 5'** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-004 Date Collected: 09.10.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:54 Basis: Wet Weight
 Seq Number: 3136852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	254	9.96	mg/kg	09.10.2020 17:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.10.2020 15:30 Basis: Wet Weight
 Seq Number: 3136854

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	09.10.2020 19:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	09.10.2020 19:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	09.10.2020 19:31	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	09.10.2020 19:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	09.10.2020 19:31	
o-Terphenyl	84-15-1	110	%	70-135	09.10.2020 19:31	



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **FL 19 @ 5'** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-004 Date Collected: 09.10.2020 00:00 Sample Depth: 5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:37 Basis: Wet Weight
 Seq Number: 3136847

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.11.2020 02:12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.11.2020 02:12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.11.2020 02:12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.11.2020 02:12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.11.2020 02:12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.11.2020 02:12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.11.2020 02:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.11.2020 02:12	
4-Bromofluorobenzene	460-00-4	93	%	70-130	09.11.2020 02:12	



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **FL 20 @ 5'** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-005 Date Collected: 09.10.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:54 Basis: Wet Weight
 Seq Number: 3136852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	137	10.1	mg/kg	09.10.2020 17:49		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.10.2020 16:30 Basis: Wet Weight
 Seq Number: 3136858

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.10.2020 21:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.10.2020 21:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.10.2020 21:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.10.2020 21:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	09.10.2020 21:11	
o-Terphenyl	84-15-1	111	%	70-135	09.10.2020 21:11	



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **FL 20 @ 5'** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-005 Date Collected: 09.10.2020 00:00 Sample Depth: 5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:37 Basis: Wet Weight
 Seq Number: 3136847

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.11.2020 02:34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.11.2020 02:34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.11.2020 02:34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.11.2020 02:34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.11.2020 02:34	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.11.2020 02:34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.11.2020 02:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.11.2020 02:34	
4-Bromofluorobenzene	460-00-4	92	%	70-130	09.11.2020 02:34	



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **SWW 4** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-006 Date Collected: 09.10.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:54 Basis: Wet Weight
 Seq Number: 3136852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	97.8	10.1	mg/kg	09.10.2020 18:06		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.10.2020 16:30 Basis: Wet Weight
 Seq Number: 3136858

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.10.2020 22:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.10.2020 22:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.10.2020 22:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.10.2020 22:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	09.10.2020 22:11	
o-Terphenyl	84-15-1	114	%	70-135	09.10.2020 22:11	



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **SWW 4** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-006 Date Collected: 09.10.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:37 Basis: Wet Weight
 Seq Number: 3136847

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.11.2020 02:57	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.11.2020 02:57	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.11.2020 02:57	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.11.2020 02:57	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.11.2020 02:57	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.11.2020 02:57	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.11.2020 02:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	83	%	70-130	09.11.2020 02:57		
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.11.2020 02:57		



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **NEW 4** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-007 Date Collected: 09.10.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:54 Basis: Wet Weight
 Seq Number: 3136852

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.1	10.1	mg/kg	09.10.2020 18:11		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.10.2020 16:30 Basis: Wet Weight
 Seq Number: 3136858

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	09.10.2020 22:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	09.10.2020 22:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	09.10.2020 22:32	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	09.10.2020 22:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	09.10.2020 22:32	
o-Terphenyl	84-15-1	117	%	70-135	09.10.2020 22:32	



Certificate of Analytical Results 672280

Etech Environmental & Safety Solution, Inc, Midland, TX Cole Stute #10

Sample Id: **NEW 4** Matrix: Soil Date Received: 09.10.2020 15:28
 Lab Sample Id: 672280-007 Date Collected: 09.10.2020 00:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.10.2020 16:37 Basis: Wet Weight
 Seq Number: 3136847

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.11.2020 03:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.11.2020 03:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.11.2020 03:19	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.11.2020 03:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.11.2020 03:19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.11.2020 03:19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.11.2020 03:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.11.2020 03:19	
4-Bromofluorobenzene	460-00-4	89	%	70-130	09.11.2020 03:19	



Etech Environmental & Safety Solution, Inc
Cole Stute #10

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3136852 Matrix: Solid Prep Method: E300P
 MB Sample Id: 7711097-1-BLK LCS Sample Id: 7711097-1-BKS Date Prep: 09.10.2020
 LCSD Sample Id: 7711097-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	254	102	254	102	90-110	0	20	mg/kg	09.10.2020 17:06	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3136852 Matrix: Soil Prep Method: E300P
 Parent Sample Id: 672280-001 MS Sample Id: 672280-001 S Date Prep: 09.10.2020
 MSD Sample Id: 672280-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	241	200	445	102	446	103	90-110	0	20	mg/kg	09.10.2020 17:22	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3136854 Matrix: Solid Prep Method: SW8015P
 MB Sample Id: 7711081-1-BLK LCS Sample Id: 7711081-1-BKS Date Prep: 09.10.2020
 LCSD Sample Id: 7711081-1-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	806	81	850	85	70-135	5	35	mg/kg	09.10.2020 11:28	
Diesel Range Organics (DRO)	<50.0	1000	875	88	929	93	70-135	6	35	mg/kg	09.10.2020 11:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		107		114		70-135	%	09.10.2020 11:28
o-Terphenyl	100		101		114		70-135	%	09.10.2020 11:28

Analytical Method: TPH by SW8015 Mod

Seq Number: 3136858 Matrix: Solid Prep Method: SW8015P
 MB Sample Id: 7711134-1-BLK LCS Sample Id: 7711134-1-BKS Date Prep: 09.10.2020
 LCSD Sample Id: 7711134-1-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	836	84	873	87	70-135	4	35	mg/kg	09.10.2020 20:31	
Diesel Range Organics (DRO)	<50.0	1000	905	91	961	96	70-135	6	35	mg/kg	09.10.2020 20:31	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		126		117		70-135	%	09.10.2020 20:31
o-Terphenyl	98		105		109		70-135	%	09.10.2020 20:31

Analytical Method: TPH by SW8015 Mod

Seq Number: 3136854 Matrix: Solid Prep Method: SW8015P
 MB Sample Id: 7711081-1-BLK Date Prep: 09.10.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.10.2020 11:08	

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
Cole Stute #10

Analytical Method: TPH by SW8015 Mod
Seq Number: 3136858

Matrix: Solid
MB Sample Id: 7711134-1-BLK

Prep Method: SW8015P
Date Prep: 09.10.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.10.2020 20:11	

Analytical Method: TPH by SW8015 Mod
Seq Number: 3136854
Parent Sample Id: 672189-001

Matrix: Soil
MS Sample Id: 672189-001 S

Prep Method: SW8015P
Date Prep: 09.10.2020
MSD Sample Id: 672189-001 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)	<50.2	1000	883	88	897	89	70-135	2	35	mg/kg	09.10.2020 12:28	
Diesel Range Organics (DRO)	<50.2	1000	988	99	1020	101	70-135	3	35	mg/kg	09.10.2020 12:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		120		70-135	%	09.10.2020 12:28
o-Terphenyl	120		118		70-135	%	09.10.2020 12:28

Analytical Method: TPH by SW8015 Mod
Seq Number: 3136858
Parent Sample Id: 672280-005

Matrix: Soil
MS Sample Id: 672280-005 S

Prep Method: SW8015P
Date Prep: 09.10.2020
MSD Sample Id: 672280-005 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)	<50.1	1000	931	93	900	90	70-135	3	35	mg/kg	09.10.2020 21:31	
Diesel Range Organics (DRO)	<50.1	1000	1050	105	1010	101	70-135	4	35	mg/kg	09.10.2020 21:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	128		131		70-135	%	09.10.2020 21:31
o-Terphenyl	128		122		70-135	%	09.10.2020 21:31

Analytical Method: BTEX by EPA 8021B
Seq Number: 3136847
MB Sample Id: 7711096-1-BLK

Matrix: Solid
LCS Sample Id: 7711096-1-BKS

Prep Method: SW5035A
Date Prep: 09.10.2020
LCSD Sample Id: 7711096-1-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	0.101	101	0.0981	98	70-130	3	35	mg/kg	09.10.2020 23:02	
Toluene	<0.00200	0.100	0.0991	99	0.0956	96	70-130	4	35	mg/kg	09.10.2020 23:02	
Ethylbenzene	<0.00200	0.100	0.0917	92	0.0888	89	71-129	3	35	mg/kg	09.10.2020 23:02	
m,p-Xylenes	<0.00400	0.200	0.184	92	0.179	90	70-135	3	35	mg/kg	09.10.2020 23:02	
o-Xylene	<0.00200	0.100	0.0927	93	0.0897	90	71-133	3	35	mg/kg	09.10.2020 23:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		98		70-130	%	09.10.2020 23:02
4-Bromofluorobenzene	87		87		88		70-130	%	09.10.2020 23:02

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

Cole Stute #10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Seq Number: 3136847

Matrix: Soil

Date Prep: 09.10.2020

Parent Sample Id: 672280-001

MS Sample Id: 672280-001 S

MSD Sample Id: 672280-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0917	92	0.122	121	70-130	28	35	mg/kg	09.10.2020 23:47	
Toluene	<0.00200	0.100	0.0904	90	0.118	117	70-130	26	35	mg/kg	09.10.2020 23:47	
Ethylbenzene	<0.00200	0.100	0.0842	84	0.110	109	71-129	27	35	mg/kg	09.10.2020 23:47	
m,p-Xylenes	<0.00401	0.200	0.170	85	0.220	109	70-135	26	35	mg/kg	09.10.2020 23:47	
o-Xylene	<0.00200	0.100	0.0837	84	0.110	109	71-133	27	35	mg/kg	09.10.2020 23:47	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		70-130	%	09.10.2020 23:47
4-Bromofluorobenzene	94		84		70-130	%	09.10.2020 23:47

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

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

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

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



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 502-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1286
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 889-6701
 Atlanta, GA (770) 449-8800

Work Order No: 672280

Project Manager: Joel Lowry
 Company Name: Etch Environmental & Safety
 Address: 3100 Plains Highway
 City, State ZIP: Lovington, NM, 88260
 Phone: 575-396-2378
 Project Name: Cole State #16
 Project Number: 11465
 Project Location: Lea County, NM
 Sampler's Name: Miguel Ramirez
 PO #:
 Bill to: (if different)
 Company Name: Grizzly
 Address:
 City, State ZIP:
 Email: Email Results to PM@etchenv.com + Client

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 Work Order Comments
 Program: UST/PST PRP Brownfields RRC Superfund
 State of Project:
 Reporting Level Level - PST/US TRR Level
 Deliverables: EDD ADAPT Other:
 Preservative Codes
 HNO3: HN
 H2SO4: H2
 HCl: HL
 None: NO
 NaOH: Na
 MeOH: Me
 Zn Acetate+ NaOH: Zn
 TAT starts the day received by the lab, if received by 4:30pm

SAMPLE RECEIPT
 Temperature (°C): 6.2/10.0
 Received Inact: Yes No
 Cooler Custody Seals: Yes No
 Sample Custody Seals: Yes No
 Wet Ice: Yes No
 Thermometer ID: T-UM-003
 Correction Factor: -0.2
 Total Containers: 7
 Turn Around:
 Routine:
 Rush:
 Due Date:
 ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chloride E300	BTEX 8021	TPH Modified Ext	TPH TX1005
FL 16 @ 5'	Soil	9.10.20		5'	1	X	X	X	X
FL 17 @ 5'	Soil	9.10.20		5'	1	X	X	X	X
FL 18 @ 5'	Soil	9.10.20		5'	1	X	X	X	X
FL 19 @ 5'	Soil	9.10.20		5'	1	X	X	X	X
FL 20 @ 5'	Soil	9.10.20		5'	1	X	X	X	X
SWAY	Soil	9.10.20		5'	1	X	X	X	X
NEWY	Soil	9.10.20		5'	1	X	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
 Relinquished by: (Signature) Received by: (Signature) Date/Time
 Relinquished by: (Signature) Received by: (Signature) Date/Time

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 09.10.2020 03.28.00 PM

Work Order #: 672280

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : T_NM_007

Sample Receipt Checklist

Comments

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Cloe Clifton
Cloe Clifton

Date: 09.10.2020

Checklist reviewed by: Jessica Kramer
Jessica Kramer

Date: 09.11.2020

Appendix D

Photographic Log

Photographic Log

Dates: 11/05/2019 , 11/8/2019

Photo Number: 1	 <p>Nov 5, 2019 at 9:19:32 AM 32.392888° N, 103.172877° W</p>
Photo Direction: West	
Photo Description: Southern end of spill and release point.	

Photo Number: 2	 <p>Nov 8, 2019 at 8:50:18 AM 32.392846° N, 103.172974° W</p>
Photo Direction: North	
Photo Description: South of spill area looking north toward the rest of the spill.	

Photographic Log

Dates: 11/5/2019, 11/5/2019

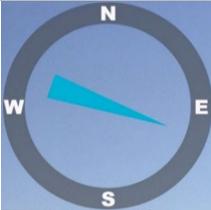
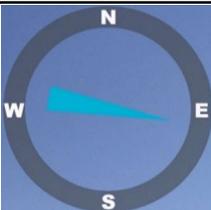
Photo Number: 3	  <p>Nov 5, 2019 at 9:20:42 AM 32.393142° N, 103.173195° W</p>
Photo Direction: East	
Photo Description: Middle of spill area.	

Photo Number: 4	  <p>Nov 5, 2019 at 9:21:19 AM 32.393226° N, 103.173279° W</p>
Photo Direction: East	
Photo Description: Northern section of the spill area.	

Photographic Log

Photo Number: 5	 	Sep 10, 2020 at 1:44:09 PM +32.392861,-103.173023 ±5.00m 324° NW
Photo Direction: Northwest		
Photo Description: Open excavation.		

Photo Number: 6	 	Sep 10, 2020 at 1:44:47 PM +32.392989,-103.173033 ±5.00m 325° NW
Photo Direction: Northwest		
Photo Description: Open excavation.		

Photographic Log

Photo Number: 7	  <p>Sep 10, 2020 at 1:45:02 PM +32.393073,-103.173074 ±5.00m 316° NW</p>
Photo Direction: Northwest	
Photo Description: Open excavation.	

Photo Number: 8	  <p>Sep 10, 2020 at 1:45:27 PM +32.393236,-103.173210 ±5.00m 297° NW</p>
Photo Direction: West	
Photo Description: Open excavation	

Photographic Log

Photo Number: 9	 <p>Sep 21, 2020 at 9:00:18 AM Jal NM 88231 United States</p>
Photo Direction: North	
Photo Description: Impacted area after backfill and grading.	

Photo Number: 10	 <p>Sep 21, 2020 at 9:00:22 AM Jal NM 88231 United States</p>
Photo Direction: North	
Photo Description: Impacted area after backfill and grading.	

Photographic Log

Photo Number: 11	 <p>Sep 21, 2020 at 9:00:31 AM Jal NM 88231 United States</p>
Photo Direction: North	
Photo Description: Impacted area after backfill and grading.	