

Incident ID	nRM2017035633
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>125</u> (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

Form C-141

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	nRM2017035633
District RP	
Facility ID	
Application ID	

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

Printed Name: Albert Ochoa

Title: HSE Representative

Signature: Albert OchoaDate: 1/15/2021email: albert.ochoa@goodnightmidstream.comTelephone: (432)242-6629**OCD Only**

Received by: _____

Date: _____

Form C-141

Page 6

State of New Mexico
Oil Conservation Division

Incident ID	nRM2017035633
District RP	
Facility ID	
Application ID	

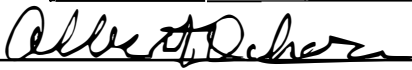
Closure

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: Albert Ochoa Title: HSE Representative
 Signature:  Date: 1/15/2021
 email: albert.ochoa@goodnightmidstream.com Telephone: (432)242-6629

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Karen Collins Date: 3/29/2021
 Printed Name: Karen Collins Title: Environmental Scientist & Specialist

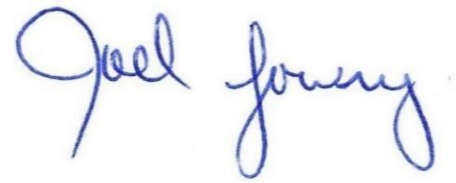
Remediation Summary & Soil Closure Request

Goodnight Midstream Permian, LLC Serrano SWD 6-1-2020

Lea County, New Mexico
Unit Letter Crude Oil, Section 28, Township 23 South, Range 35 East
Latitude 32.279578 North, Longitude 103.372792 West
NMOCD Reference No. nRM2017035633

Prepared By:

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


Matthew Grieco
Joel W. Lowry

Midland • San Antonio • Lubbock • Lovington • Lafayette

TABLE OF CONTENTS

	Section
PROJECT INFORMATION.....	1.0
SITE CHARACTERIZATION.....	2.0
CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE.....	3.0
REMEDIAATION ACTIVITIES SUMMARY.....	4.0
SOIL CLOSURE REQUEST.....	5.0
LIMITATIONS.....	6.0
DISTRIBUTION.....	7.0

FIGURES

- Figure 1 - Topographic Map
- Figure 2 - Aerial Proximity Map
- Figure 3 - Site & Sample Location Map

TABLES

- Table 1 - Concentrations of BTEX, TPH & Chloride in Soil

APPENDICES

- Appendix A - Depth to Groundwater Information
- Appendix B - Field Data
- Appendix C - Laboratory Analytical Reports
- Appendix D - Photographic Log

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Goodnight Midstream Permian, LLC, has prepared this *Remediation Summary & Soil Closure Request* for the release site known as the Serrano SWD 6-1-2020. Details of the release are summarized below:

Location of Release Source

Latitude: 32.279578 Longitude: -103.372792
 Provided GPS are in WGS84 format.

Site Name: Serrano SWD 6-1-2020	Site Type: SWD
Date Release Discovered: 6/1/2020	API # (if applicable): N/A

Unit Letter	Section	Township	Range	County
Crude Oil	28	23S	35E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name Limestone Basin Properties Ranch, LLC)

Nature and Volume of Release

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 20	Volume Recovered (bbls) 10
	Is the concentration of total dissolved solids (TDS) in the produced water > 10,000 mg/L?	☒ Yes ☐ No ☐ N/A
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:

A crew was backfilling an open ditch that connects the charge pumps to the tanks. When the backhoe operator was putting soft dirt on top of the line, the backhoe nicked the top of the line, causing the release. The entire release was contained in the ditch on the pad site, and 10 bbls were recovered.

Initial Response

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
- ☒ 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?	125'	
Did the release impact groundwater or surface water?	☐ Yes	☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes	☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes	☒ No
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	☐ Yes	☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes	☒ No
Are the lateral extents of the release within 1,000 feet of any other fresh water well or spring?	☐ Yes	☒ No
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes	☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes	☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes	☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes	☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes	☒ No
Did the release impact areas not on an exploration, development, production or storage site?	☐ Yes	☒ No

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

Although Figures 2 and 5 show the presence of water wells approximately 800 to 1,000 feet northwest of the release site, a search of the National Water Information System (NWIS) indicates USGS well 321652103222901 is inactive. Wells CP-01100-POD1, CP-01100-POD2, and CP-01100-POD3 are commercial water wells providing non-potable water for oilfield operations.

On January 4, 2021, a groundwater sample was collected from well CP-01100-POD3 in an effort to determine the background concentration of chloride in the area. The groundwater sample was submitted to a certified commercial laboratory for analysis of chloride and total dissolved solids (TDS). Laboratory analytical results indicated the chloride concentration was 282 mg/L, and the TDS concentration was 1,580 mg/L. Since the background concentrations of chloride and TDS exceed the New Mexico Water Quality Control Commission (NMWQCC) standards of 250.0 mg/L and 1,000.0 mg/L specified in Sections 20.6.2.3103 B.(1) and B.(7), respectively, of the New Mexico Administrative Code (NMAC), wells CP-01100-POD1, -POD2, and -POD3 are not "fresh water" wells, pursuant to NMAC Section 19.15.29.12 C.(4)(c)(ii).

Results of the USGS NWIS database query are provided in Appendix A. Groundwater sample data is provided in Appendix C.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

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

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

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

4.0 REMEDIATION ACTIVITIES SUMMARY

In July 2020, a third-party contractor commenced remediation activities at the site. In accordance with NMOCD regulatory guidelines, impacted soil was excavated and stockpiled on-site, pending transfer to an NMOCD-approved surface waste facility for disposal. The floor and sidewalls of the excavation were advanced until field observations suggested BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria.

On July 27, 2020, Etech collected five (5) confirmation soil samples (FL1 @ 6', FL2 @ 6', FL3 @ 6', FL4 @ 6', and FL5 @ 2') from the floor of the excavation. In addition, hand-augered soil bores were advanced outside the inferred edges of the affected area in an effort to confirm that horizontal delineation of the release had been achieved. Based on field observations and field test data, eight (8) delineation samples (NH @ 2', NH @ 3', EH @ 2', EH @ 3', SH @ 2', SH @ 3', WH @ 2', and WH @ 3') were submitted to a certified commercial laboratory along with the five (5) floor samples for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples. Based on laboratory analytical results, the horizontal extent of impacted soil was adequately defined.

On August 6, 2020, Etech collected four (4) confirmation soil samples (NW, EW, SW, and WW) from the sidewalls of the excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

The final dimensions of the excavated area were 55 feet in length, 10 to 14 feet in width, and 2 to 6 feet in depth. During the course of remediation activities, approximately 96 cubic yards of impacted soil were transported to an NMOCD-approved surface waste facility for disposal.

Soil sample locations are depicted in Figure 3, "Site & Sample Location Map". A soil chemistry table is provided as Table 1. Field data is provided in Appendix B. Laboratory analytical reports are provided in Appendix C. General photographs of the release site are provided in Appendix D.

5.0 SOIL CLOSURE REQUEST

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

Based on laboratory analytical results and field activities conducted to date, Etech recommends Goodnight Midstream Permian, LLC, provide copies of this *Remediation Summary & Soil Closure Request* to the appropriate agencies and request closure be granted to the Serrano SWD 6-1-2020 Site.

6.0 LIMITATIONS

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

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

7.0 DISTRIBUTION

Goodnight Midstream Permian, LLC

*5910 N Central Expy
Dallas, TX 75206*

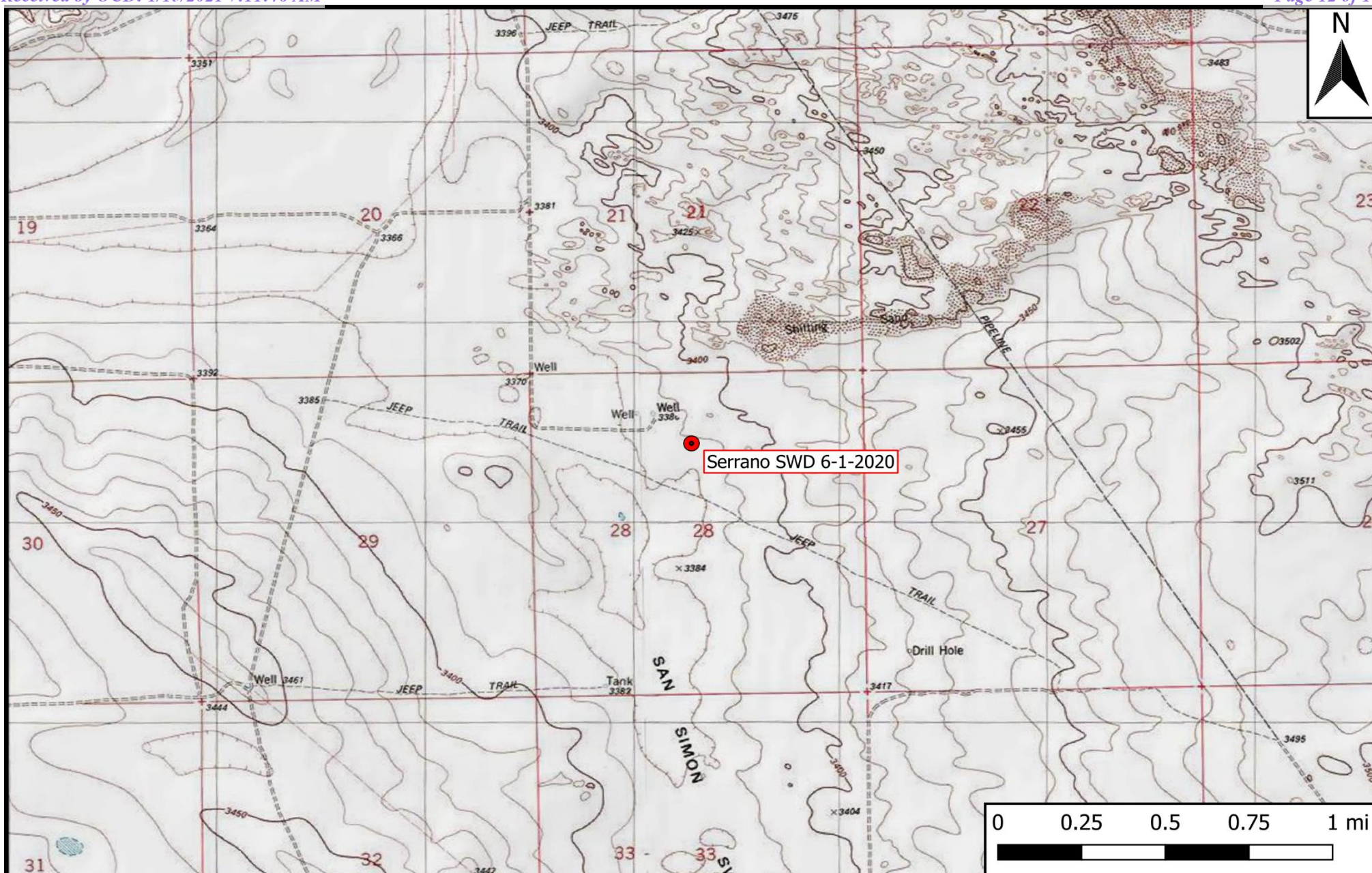
New Mexico Energy, Minerals and Natural Resources Department

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

(Electronic Submission)

Figure 1

Topographic Map



Legend

- Site Location

Figure 1

Topographic Map
 Goodnight Midstream Permian, LLC
 Serrano SWD 6-1-2020
 GPS: 32.279578, -103.372792
 Lea County

eTECH
 Environmental & Safety Solutions, Inc.

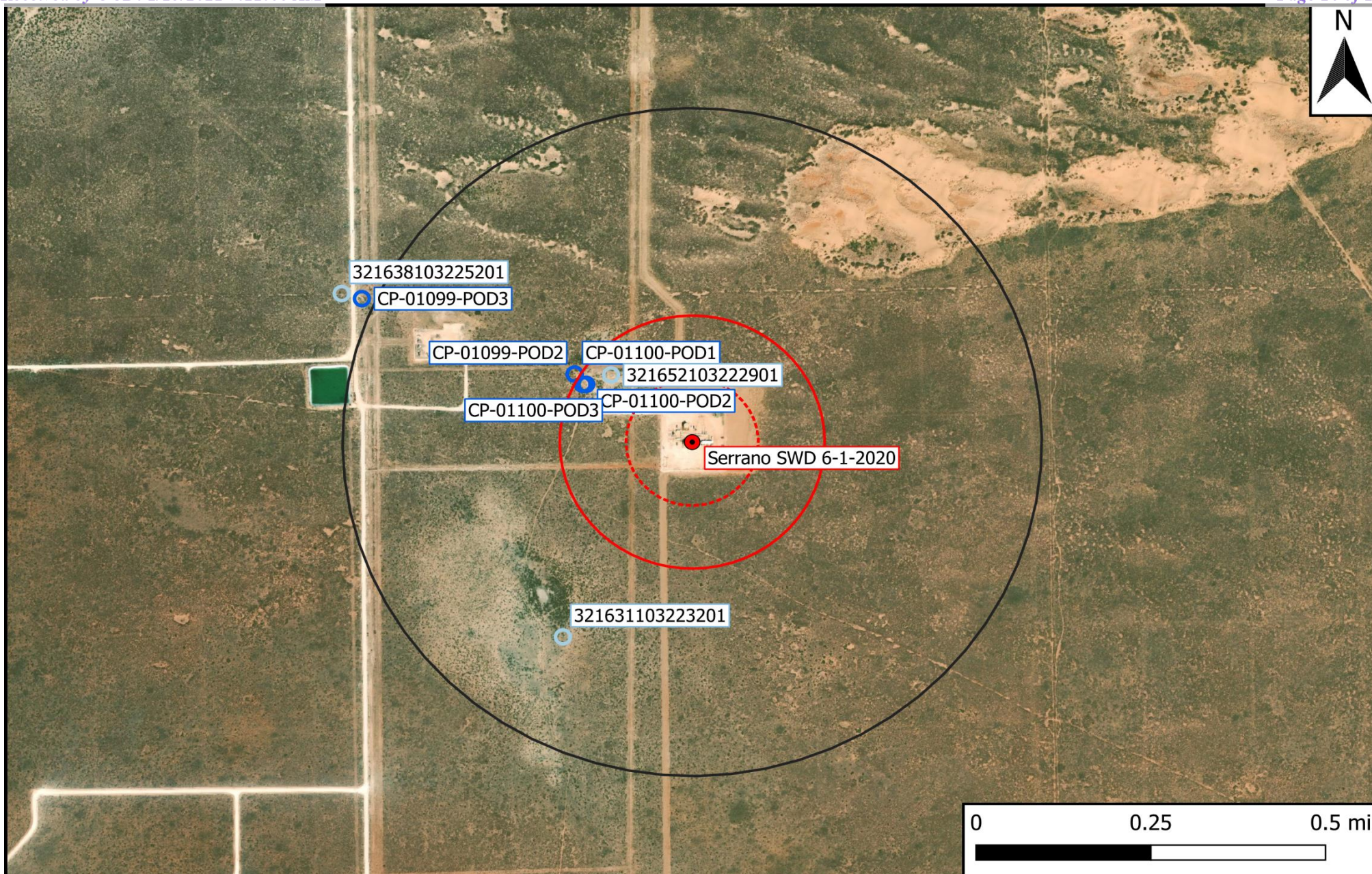
Drafted: bja

Checked: jwl

Date: 12/10/20

Figure 2

Aerial Proximity Map



Legend

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

Figure 2

Aerial Proximity Map
 Goodnight Midstream Permian, LLC
 Serrano SWD 6-1-2020
 GPS: 32.279578, -103.372792
 Lea County



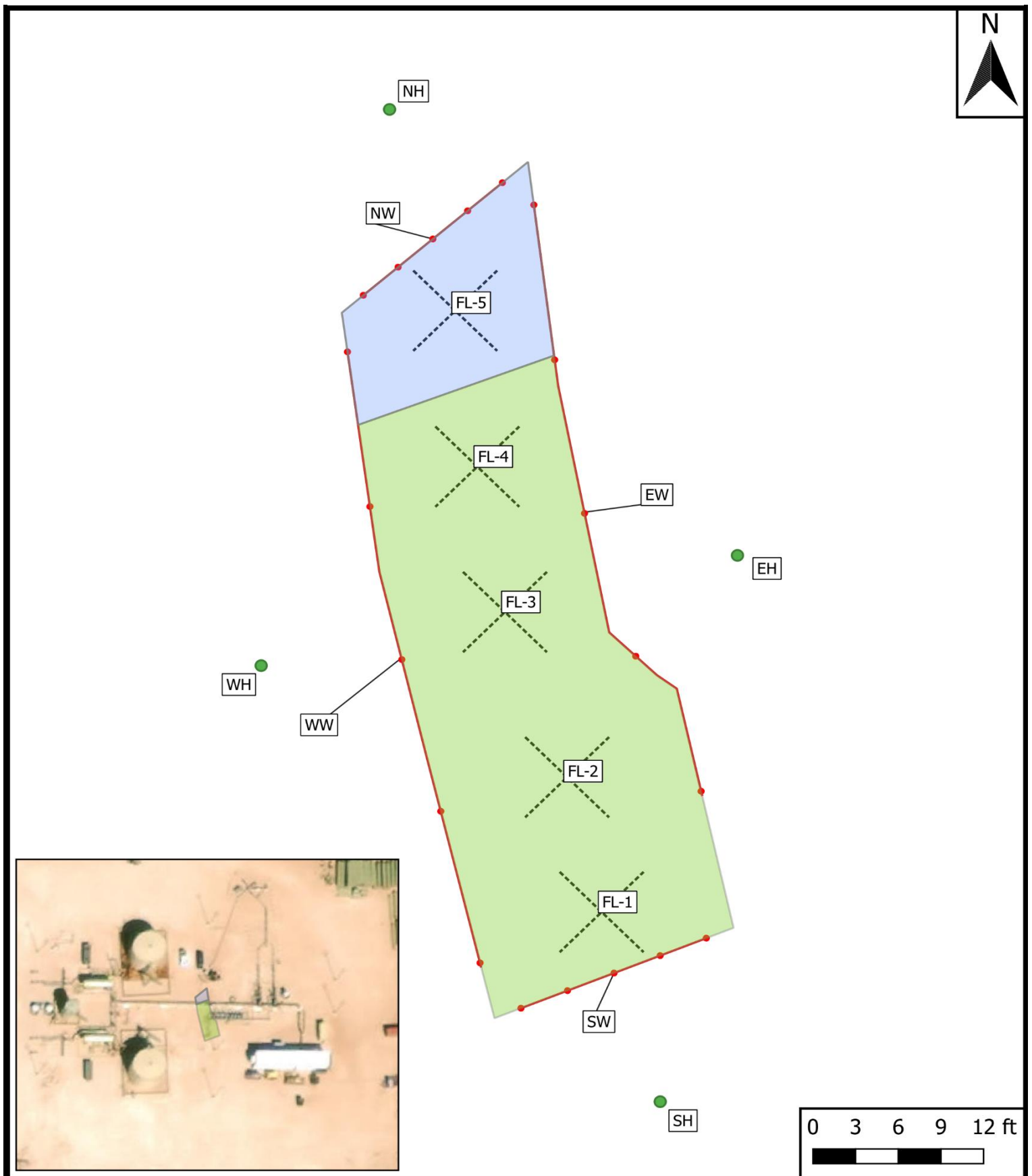
Drafted: bja

Checked: jwl

Date: 1/13/21

Figure 3

Site & Sample Location Map



Legend

- Excavation (2' bgs)
- Excavation (6' bgs)
- Composite Floor Sample
- Composite Wall Sample
- Sample Point

Figure 3
 Site & Sample Location Map
 Goodnight Midstream Permian, LLC
 Serrano SWD 6-1-2020
 GPS: 32.279578, -103.372792
 Lea County

eTECH 
 Environmental & Safety Solutions, Inc.

Drafted: bja

Checked: jwl

Date: 12/10/20

Table 1
Concentrations of BTEX, TPH & Chloride in Soil

TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
Goodnight Midstream Permian, LLC
Serrano SWD 6-1-2020
NMOCD Ref. #: nRM2017035633

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	20,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
NH @ 2'	7/27/2020	2'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	<4.96
NH @ 3'	7/27/2020	3'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	148
EH @ 2'	7/27/2020	2'	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	<5.00
EH @ 3'	7/27/2020	3'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	94.4
SH @ 2'	7/27/2020	2'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	49.0
SH @ 3'	7/27/2020	3'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	21.5
WH @ 2'	7/27/2020	2'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	28.9
WH @ 3'	7/27/2020	3'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	<5.00
FL1 @ 6'	7/27/2020	6'	In-Situ	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	845
FL2 @ 6'	7/27/2020	6'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	2,250
FL3 @ 6'	7/27/2020	6'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	9,560
FL4 @ 6'	7/27/2020	6'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	3,560
FL5 @ 2'	7/27/2020	2'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	1,090
NW	8/6/2020	0' - 2'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	2,770
EW	8/6/2020	0' - 6'	In-Situ	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	2,180
SW	8/6/2020	0' - 6'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	1,600
WW	8/6/2020	0' - 6'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	3,900

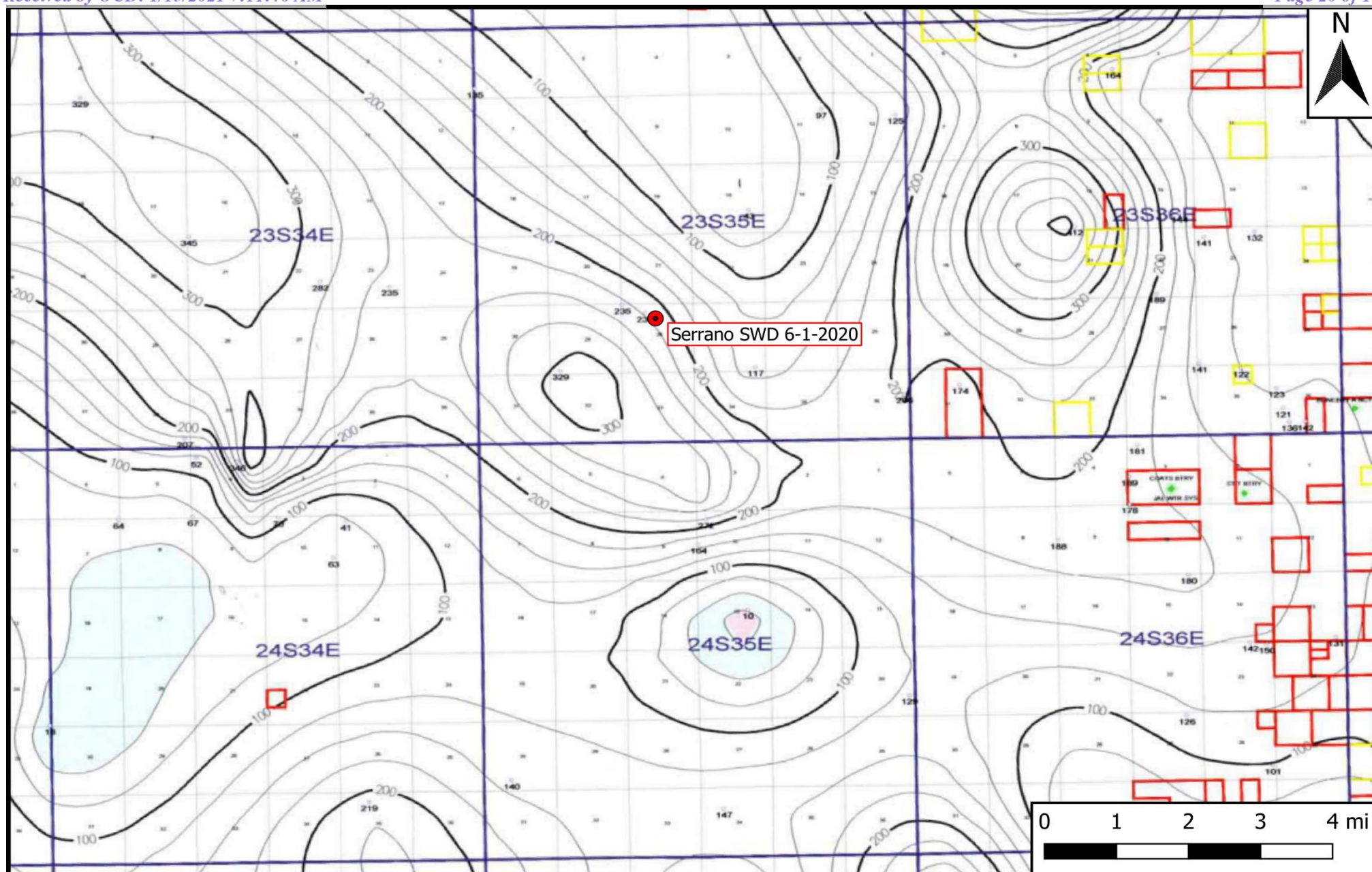
NOTES:

- = 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
 Goodnight Midstream Permian, LLC
 Serrano SWD 6-1-2020
 GPS: 32.279578, -103.372792
 Lea County

eTECH
 Environmental & Safety Solutions, Inc.

Drafted: bja

Checked: jwl

Date: 12/10/20



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01100 POD2	CP	LE		2	1	28	23S	35E		652995	3572726	280	750	125	625
CP 01100 POD3	CP	LE		3	2	1	28	23S	35E	652987	3572726	287	950	730	220
CP 01099 POD2	CP	LE		3	3	3	21	23S	35E	652968	3572750	316	750	120	630

Average Depth to Water: **325 feet**

Minimum Depth: **120 feet**

Maximum Depth: **730 feet**

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 653239.2

Northing (Y): 3572587.78

Radius: 804.67

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.

1/4/21 10:03 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64 Q16 Q4 Sec Tws Rng	X	Y
221C1	CP 01100 POD2	2 1 28 23S 35E	652995	3572726 

Driller License: 1706 **Driller Company:** ELITE DRILLERS CORPORATION

Driller Name: WALLACE, BRYCE J.LEE.NER

Drill Start Date: 12/02/2018	Drill Finish Date: 12/06/2018	Plug Date:
Log File Date: 03/01/2019	PCW Rcv Date:	Source: Artesian
Pump Type:	Pipe Discharge Size:	Estimated Yield: 88 GPM
Casing Size: 8.00	Depth Well: 750 feet	Depth Water: 125 feet

Water Bearing Stratifications:	Top	Bottom	Description
	120	230	Sandstone/Gravel/Conglomerate
	610	650	Sandstone/Gravel/Conglomerate
	650	680	Sandstone/Gravel/Conglomerate
	680	740	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	470	750

Meter Number: 18925	Meter Make: SEAMETRICS
Meter Serial Number: 042018001248	Meter Multiplier: 1.0000
Number of Dials: 8	Meter Type: Diversion
Unit of Measure: Barrels 42 gal.	Return Flow Percent:
Usage Multiplier:	Reading Frequency: Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr Comment	Mtr Amount Online
01/01/2019	2019	0	A	RPT installed 1st week January '19	0
07/01/2019	2019	148340	A	RPT	19.120
08/02/2019	2019	164717	A	RPT	2.111
09/01/2019	2019	187774	A	RPT	2.972
10/01/2019	2019	217001	A	RPT	3.767
11/08/2019	2019	251254	A	RPT	4.415
12/03/2019	2019	279755	A	RPT	3.674
02/01/2020	2020	316646	A	RPT	4.755
03/02/2020	2020	349558	A	RPT	4.242
04/01/2020	2020	378792	A	RPT	3.768
05/04/2020	2020	409438	A	RPT	3.950

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
06/04/2020	2020	447579	A	RPT		4.916
07/02/2020	2020	480586	A	RPT		4.254
08/03/2020	2020	518577	A	RPT		4.897
10/09/2020	2020	593680	A	RPT		9.680

**YTD Meter Amounts:	Year	Amount
	2019	36.059
	2020	40.462

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.



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
NA	CP 01100 POD3	3	2	1	28	23S	35E	652987	3572726 

Driller License: 1706	Driller Company: ELITE DRILLERS CORPORATION
Driller Name: WALLACE, BRYCE J.LEE.NER	
Drill Start Date: 09/12/2020	Drill Finish Date: 11/01/2020
Log File Date: 11/17/2020	PCW Rcv Date:
Pump Type:	Pipe Discharge Size:
Casing Size: 7.87	Depth Well: 950 feet
	Plug Date:
	Source: Artesian
	Estimated Yield: 55 GPM
	Depth Water: 730 feet

Water Bearing Stratifications:	Top	Bottom	Description
	705	940	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	650	950

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.



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
221C0	CP 01099 POD2	3 3 3 21 23S 35E	652968	3572750 

Driller License: 1706 **Driller Company:** ELITE DRILLERS CORPORATION

Driller Name: WALLACE, BRYCE J.LEE.NER

Drill Start Date: 01/10/2019

Drill Finish Date: 01/13/2019

Plug Date:

Log File Date: 01/24/2019

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield: 90 GPM

Casing Size: 7.60

Depth Well: 750 feet

Depth Water: 120 feet

Water Bearing Stratifications:

Top Bottom Description

115	220	Sandstone/Gravel/Conglomerate
580	600	Sandstone/Gravel/Conglomerate
600	740	Other/Unknown

Casing Perforations:

Top Bottom

460	750
-----	-----

Meter Number: 18926

Meter Make: SEAMETRICS

Meter Serial Number: 042018001241

Meter Multiplier: 1.0000

Number of Dials: 8

Meter Type: Diversion

Unit of Measure: Barrels 42 gal.

Return Flow Percent:

Usage Multiplier:

Reading Frequency: Monthly

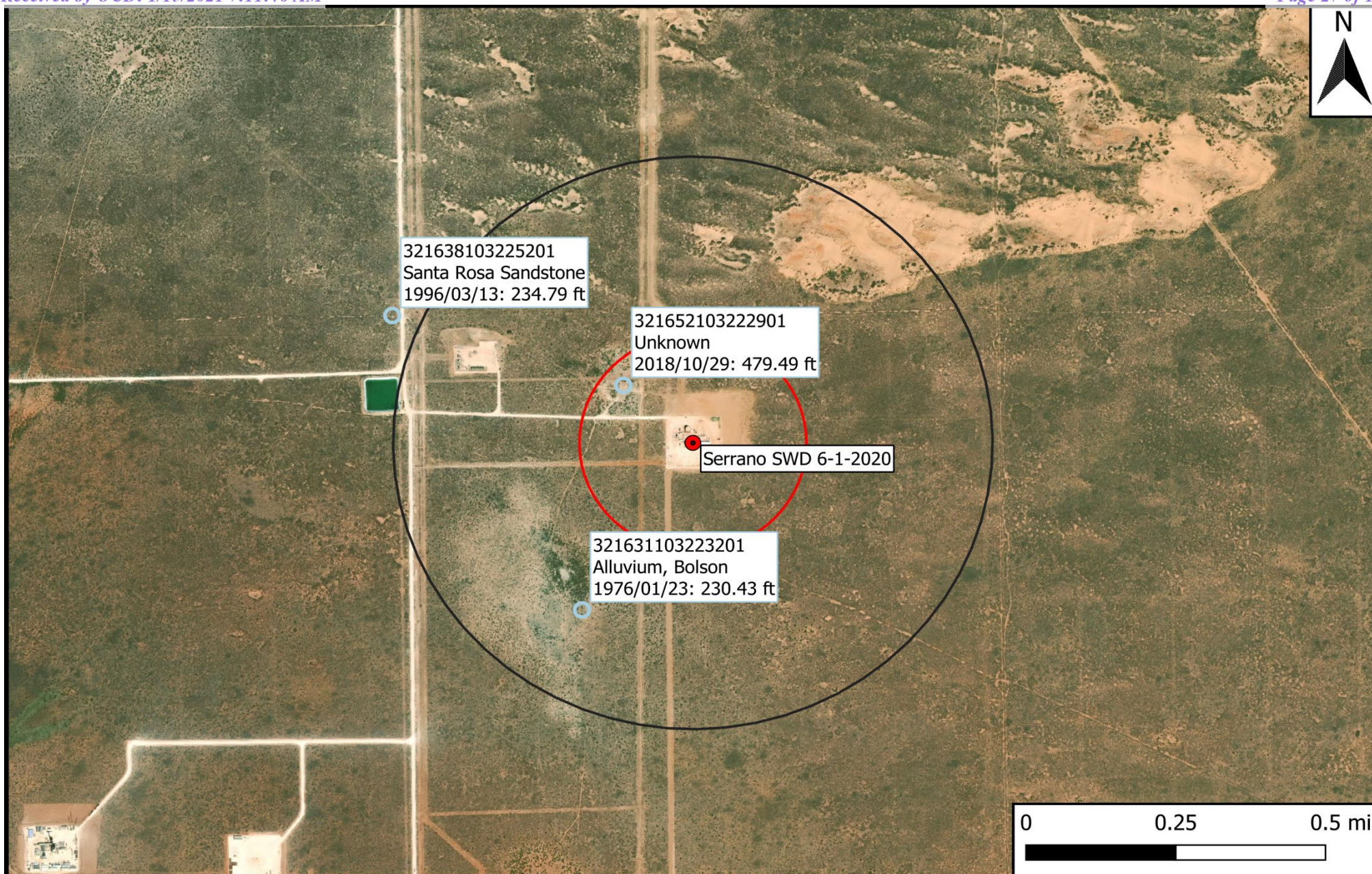
Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr Comment	Mtr Amount Online
01/01/2019	2019	0	A	RPT initial reading 01/2019	0
03/31/2019	2019	38876	A	RPT	5.011
07/01/2019	2019	74582	A	RPT	4.602
08/02/2019	2019	79810	A	RPT	0.674
09/01/2019	2019	92669	A	RPT	1.657
09/14/2019	2019	96773	A	RPT Final meter reading. Malfunctioni	0.529
09/14/2019	2019	3722	A	ca Initial reading new meter	0
10/01/2019	2019	13248	A	ca	1.228
11/04/2019	2019	31369	A	RPT	2.336
12/03/2019	2019	47756	A	RPT	2.112
02/01/2020	2020	66698	A	RPT	2.442
03/02/2020	2020	82490	A	RPT	2.036

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
04/01/2020	2020	92297	A	RPT		1.264
04/13/2020	2020	92297	A	RPT	Final Read; meter not working	0
04/13/2020	2020	250287	A	RPT	Initial Meter Reading	0
05/04/2020	2020	260757	A	RPT		1.349
06/04/2020	2020	274289	A	RPT		1.744
07/01/2020	2020	280383	A	RPT		0.786
08/03/2020	2020	280462	A	RPT		0.010
10/09/2020	2020	280543	A	RPT		0.010
11/06/2020	2020	294222	A	RPT		1.763

**YTD Meter Amounts:	Year	Amount
	2019	18.149
	2020	11.404



Legend

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

Figure 5

USGS Well Proximity Map
Goodnight Midstream Permian, LLC
Serrano SWD 6-1-2020
GPS: 32.279578, -103.372792
Lea County



Drafted: bja

Checked: jwl

Date: 1/12/21



science for a changing world



USGS Home
Contact USGS
Search USGS

National Water Information System: Mapper

Help Info

Sites Map

Search

Surface-Water Sites

Groundwater Sites

☒ Active Sites

- ☐ Any data
- ☐ Instantaneous data
- ☐ Daily data
- ☐ Water-quality data
- ☐ Measurements
- ☐ Annual Report

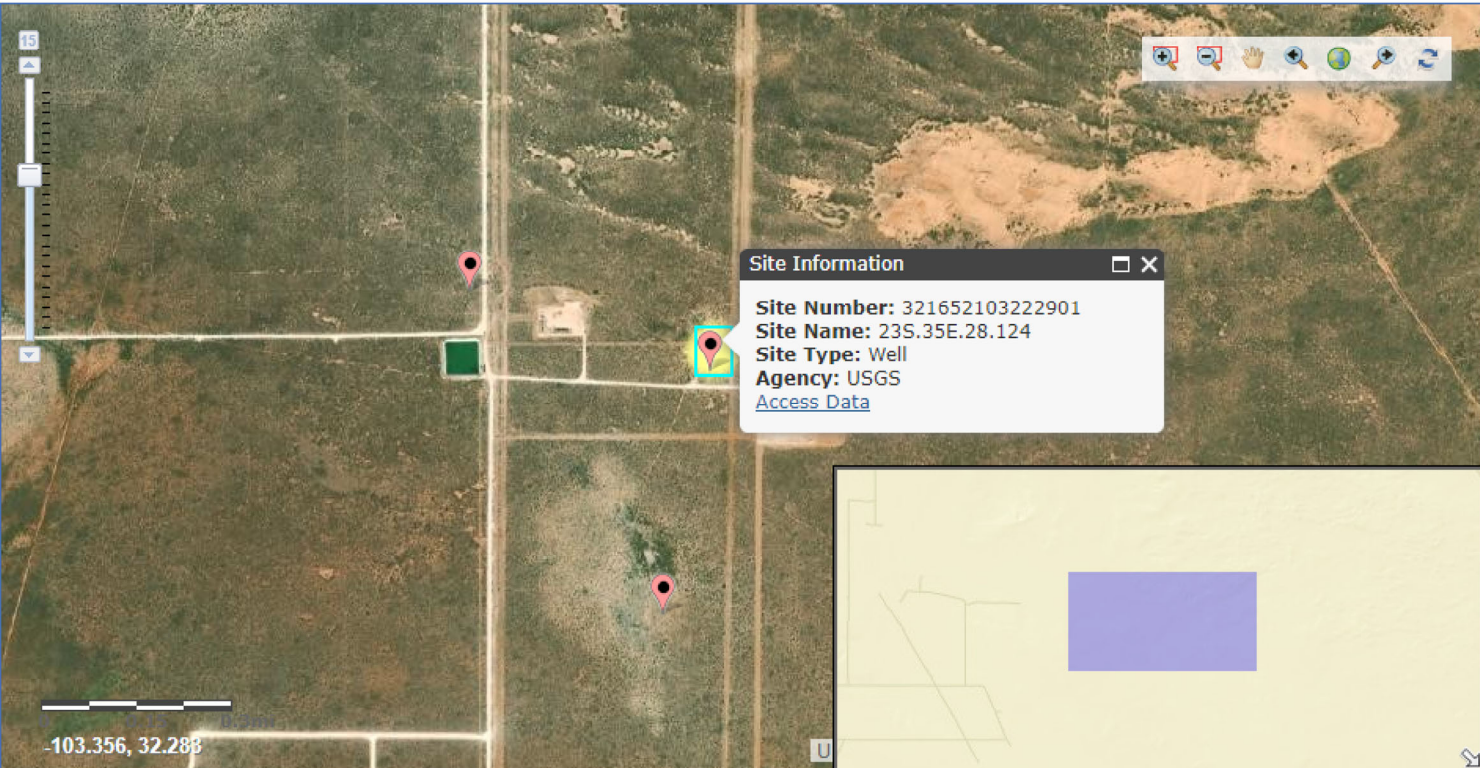
☒ Inactive Sites

- ☐ Any data
- ☐ Instantaneous data
- ☐ Daily data
- ☐ Water-quality data
- ☐ Measurements
- ☐ Annual Report

Springs

Atmospheric Sites

Other Sites



Site Information

Site Number: 321652103222901
Site Name: 23S.35E.28.124
Site Type: Well
Agency: USGS
[Access Data](#)

Site Information

Status Surface-Water Groundwater Springs Atmospheric Other

Active

Inactive

Site Number	Site Name	Site Type	Status	Agency	Access Data
321638103225201	23S.35E.28.11111	Well	Inactive	USGS	Access Data
321631103223201	23S.35E.28.12321	Well	Inactive	USGS	Access Data
321652103222901	23S.35E.28.124	Well	Inactive	USGS	Access Data

Export...



National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hideNews Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321631103223201

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

USGS 321631103223201 23S.35E.28.12321

Lea County, New Mexico
Latitude 32°16'31", Longitude 103°22'32" NAD27
Land-surface elevation 3,369 feet above NAVD88
The depth of the well is 242 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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1967-10-17		D	233.71			2		U		U	A
1976-01-23		D	230.43			2		U		U	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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





National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hideNews Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321638103225201

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

USGS 321638103225201 23S.35E.28.11111

Lea County, New Mexico
Latitude 32°16'58", Longitude 103°22'51" NAD27
Land-surface elevation 3,370.00 feet above NGVD29
The depth of the well is 795 feet below land surface.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1967-10-17		D	230.67				2		U		A
1968-06-11		D	230.26				2		U		A
1970-12-09		D	230.02				2		U		A
1976-01-23		D	231.57				2		U		A
1981-03-30		D	233.10				2		U		A
1986-04-17		D	233.11				2		U		A
1991-05-16		D	233.30				2		U		A
1996-03-13		D	234.79				2		S		A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)
[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#) [Plug-Ins](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

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



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

Page Last Modified: 2020-07-27 12:31:13 EDT

0.24 0.22 nadww02



National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

GO

Click to hideNews Bulletins

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

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321652103222901

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

USGS 321652103222901 23S.35E.28.124

Lea County, New Mexico
Latitude 32°16'51.8", Longitude 103°22'29.1" NAD83
Land-surface elevation 3,388 feet above NAVD88
The depth of the well is 5,300 feet below land surface.

Output formats

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

Date	Time	Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Water-level accuracy	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
2012-11-29	14:50 MST	m	536.09			2		T	USGS	S	A
2013-06-24	14:40 MDT	m	529.82			2		T	USGS	S	A
2013-09-09	13:45 MDT	m	527.73			2		T	USGS	S	A
2013-12-02	13:20 MST	m	526.05			2		T	USGS	S	A
2014-03-17	12:55 MDT	m	525.52			2		T	USGS	S	A
2014-06-30	13:35 MDT	m	520.42			2		T	USGS	S	A
2014-09-29	13:30 MDT	m	520.81			2		T	USGS	S	A
2014-12-01	13:45 MST	m	519.81			2		T	USGS	S	A
2015-03-27	10:00 MDT	m	517.51			2		T	USGS	S	A
2015-05-18	13:10 MDT	m	515.97			2		T	USGS	S	A
2015-09-28	12:55 MDT	m	510.56			2		T	USGS	S	A
2015-12-01	12:55 MST	m	509.01			2		T	USGS	S	A
2016-03-21	10:45 MDT	m	508.91			2		T	USGS	S	A
2016-06-29	14:00 MDT	m	508.99			2		T	USGS	S	A
2016-09-21	12:05 MST	m	506.50			2		T	USGS	S	A
2016-12-12	12:10 MST	m	503.34			2		V	USBLM	R	A
2017-03-09	12:45 MST	m	499.45			2		V	USBLM	R	A
2017-06-12	11:55 MDT	m	495.72			2		V	USBLM	R	A
2017-10-19	16:15 MDT	m	490.47			2		V	USBLM	R	A
2017-12-14	13:59 MST	m	490.40			2		V	USBLM	R	A
2018-03-26	13:37 MDT	m	486.38			2		V	USBLM	R	A
2018-06-25	12:48 MDT	m	484.93			2		V	USBLM	R	A
2018-10-29	14:50 MDT	m	479.49			2		V	USBLM	R	A

Section	Code	Description
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	T	Electric-tape measurement.
Method of measurement	V	Calibrated electric-tape measurement.
Measuring agency	USBLM	U.S. Bureau of Land Management
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	R	Reported by person other than the owner, driller, or another government agency.
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)[Feedback on this web site](#)[Automated retrievals](#)[Help](#)[Data Tips](#)[Explanation of terms](#)[Subscribe for system changes](#)[News](#)[Accessibility](#) [Plug-Ins](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)**Title: Groundwater for USA: Water Levels****URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2020-07-27 12:31:15 EDT

0.29 0.25 nadww02

Appendix B

Field Data



Sample Log

Date: 1-27-20

Project: Serrano

Project Number: 1087 12803 Latitude: _____ Longitude: _____

[illegible]

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

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

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

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

Appendix C

Laboratory Analytical Reports

Certificate of Analysis Summary 668592

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Serrano

Project Id: 12803
Contact: PM
Project Location: Lea County, NM

Date Received in Lab: Thu 07.30.2020 10:40
Report Date: 08.10.2020 11:50
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	668592-001	668592-002	668592-003	668592-004	668592-005	668592-006
	<i>Field Id:</i>	NH @ 2'	NH @ 3'	EH @ 2'	EH @ 3'	SH @ 2'	SH @ 3'
	<i>Depth:</i>	2- ft	3- ft	2- ft	3- ft	2- ft	3- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.27.2020 00:00	07.27.2020 00:00	07.27.2020 00:00	07.27.2020 00:00	07.27.2020 00:00	07.27.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.04.2020 10:00	08.04.2020 10:00	08.04.2020 10:00	08.04.2020 10:00	08.04.2020 10:00	08.04.2020 10:00
	<i>Analyzed:</i>	08.04.2020 17:27	08.04.2020 19:09	08.04.2020 19:30	08.04.2020 19:50	08.04.2020 20:11	08.04.2020 20:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399	<0.00401 0.00401	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	07.30.2020 15:45	07.30.2020 15:45	07.30.2020 15:45	07.30.2020 15:45	07.30.2020 15:45	07.31.2020 12:40
	<i>Analyzed:</i>	07.30.2020 18:34	07.30.2020 18:40	07.30.2020 18:46	07.30.2020 18:52	07.30.2020 18:58	07.31.2020 13:33
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<4.96 4.96	148 4.98	<5.00 5.00	94.4 5.00	49.0 5.00	21.5 5.04
TPH By SW8015 Mod	<i>Extracted:</i>	07.30.2020 17:00	07.30.2020 17:00	07.30.2020 17:00	07.30.2020 17:00	07.30.2020 17:00	07.30.2020 17:00
	<i>Analyzed:</i>	07.31.2020 07:24	07.31.2020 07:42	07.31.2020 08:01	07.31.2020 08:19	07.31.2020 08:38	07.31.2020 08:56
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 668592

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Serrano

Project Id: 12803
Contact: PM
Project Location: Lea County, NM

Date Received in Lab: Thu 07.30.2020 10:40
Report Date: 08.10.2020 11:50
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	668592-007	668592-008	668592-009	668592-010	668592-011	668592-012
	<i>Field Id:</i>	WH @ 2'	WH @ 3'	FL1 @ 6'	FL2 @ 6'	FL3 @ 6'	FL4 @ 6'
	<i>Depth:</i>	2- ft	3- ft	6- ft	6- ft	6- ft	6- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.27.2020 00:00	07.27.2020 00:00	07.27.2020 00:00	07.27.2020 00:00	07.27.2020 00:00	07.27.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.04.2020 10:00	08.04.2020 10:00	08.04.2020 10:00	08.04.2020 10:00	08.05.2020 08:00	08.05.2020 08:00
	<i>Analyzed:</i>	08.04.2020 21:53	08.04.2020 22:13	08.04.2020 22:34	08.04.2020 22:54	08.06.2020 19:40	08.06.2020 20:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00396 0.00396	<0.00397 0.00397	<0.00397 0.00397	<0.00398 0.00398
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	07.31.2020 12:40	07.31.2020 12:40	07.31.2020 12:40	07.31.2020 12:40	08.06.2020 16:21	08.07.2020 10:00
	<i>Analyzed:</i>	07.31.2020 13:52	07.31.2020 13:58	07.31.2020 14:04	07.31.2020 14:11	08.06.2020 18:45	08.07.2020 10:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		28.9 4.96	<5.00 5.00	845 4.99	2250 25.3	9560 50.5	3560 25.2
TPH By SW8015 Mod	<i>Extracted:</i>	07.30.2020 17:00	07.30.2020 17:00	07.30.2020 17:00	07.30.2020 17:00	08.06.2020 11:00	08.06.2020 17:00
	<i>Analyzed:</i>	07.31.2020 09:15	07.31.2020 09:33	07.31.2020 09:52	07.31.2020 10:10	08.06.2020 20:12	08.07.2020 01:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 668592

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Serrano

Project Id: 12803
 Contact: PM
 Project Location: Lea County, NM

Date Received in Lab: Thu 07.30.2020 10:40
 Report Date: 08.10.2020 11:50
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 668592-013 Field Id: FL5 @ 2' Depth: 2- ft Matrix: SOIL Sampled: 07.27.2020 00:00					
BTEX by EPA 8021B	Extracted: 08.05.2020 08:00 Analyzed: 08.06.2020 20:21 Units/RL: mg/kg RL					
Benzene	<0.00199 0.00199					
Toluene	<0.00199 0.00199					
Ethylbenzene	<0.00199 0.00199					
m,p-Xylenes	<0.00398 0.00398					
o-Xylene	<0.00199 0.00199					
Total Xylenes	<0.00199 0.00199					
Total BTEX	<0.00199 0.00199					
Chloride by EPA 300	Extracted: 08.07.2020 10:00 Analyzed: 08.07.2020 11:05 Units/RL: mg/kg RL					
Chloride	1090 4.98					
TPH By SW8015 Mod	Extracted: 08.06.2020 17:00 Analyzed: 08.07.2020 01:48 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



Analytical Report 668592

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Serrano

12803

08.10.2020

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.10.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **668592**

Serrano

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) 668592. 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. 668592 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 668592****Etech Environmental & Safety Solution, Inc, Midland, TX**

Serrano

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NH @ 2'	S	07.27.2020 00:00	2 ft	668592-001
NH @ 3'	S	07.27.2020 00:00	3 ft	668592-002
EH @ 2'	S	07.27.2020 00:00	2 ft	668592-003
EH @ 3'	S	07.27.2020 00:00	3 ft	668592-004
SH @ 2'	S	07.27.2020 00:00	2 ft	668592-005
SH @ 3'	S	07.27.2020 00:00	3 ft	668592-006
WH @ 2'	S	07.27.2020 00:00	2 ft	668592-007
WH @ 3'	S	07.27.2020 00:00	3 ft	668592-008
FL1 @ 6'	S	07.27.2020 00:00	6 ft	668592-009
FL2 @ 6'	S	07.27.2020 00:00	6 ft	668592-010
FL3 @ 6'	S	07.27.2020 00:00	6 ft	668592-011
FL4 @ 6'	S	07.27.2020 00:00	6 ft	668592-012
FL5 @ 2'	S	07.27.2020 00:00	2 ft	668592-013



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Serrano

Project ID: 12803
Work Order Number(s): 668592

Report Date: 08.10.2020
Date Received: 07.30.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **NH @ 2'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-001 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.30.2020 15:45 Basis: Wet Weight
 Seq Number: 3133122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	07.30.2020 18:34	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.31.2020 07:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.31.2020 07:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.31.2020 07:24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.31.2020 07:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	07.31.2020 07:24	
o-Terphenyl	84-15-1	125	%	70-130	07.31.2020 07:24	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **NH @ 2'** Matrix: **Soil** Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-001 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: **AMF** % Moisture:
 Analyst: **AMF** Date Prep: 08.04.2020 10:00 Basis: **Wet Weight**
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.04.2020 17:27	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.04.2020 17:27	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.04.2020 17:27	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.04.2020 17:27	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.04.2020 17:27	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.04.2020 17:27	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.04.2020 17:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	08.04.2020 17:27		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.04.2020 17:27		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **NH @ 3'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-002 Date Collected: 07.27.2020 00:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.30.2020 15:45 Basis: Wet Weight
 Seq Number: 3133122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	148	4.98	mg/kg	07.30.2020 18:40		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.31.2020 07:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.31.2020 07:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.31.2020 07:42	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.31.2020 07:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	07.31.2020 07:42	
o-Terphenyl	84-15-1	122	%	70-130	07.31.2020 07:42	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **NH @ 3'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-002 Date Collected: 07.27.2020 00:00 Sample Depth: 3 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.04.2020 10:00 Basis: Wet Weight
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.04.2020 19:09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.04.2020 19:09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.04.2020 19:09	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.04.2020 19:09	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.04.2020 19:09	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.04.2020 19:09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.04.2020 19:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.04.2020 19:09		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.04.2020 19:09		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **EH @ 2'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-003 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.30.2020 15:45 Basis: Wet Weight
 Seq Number: 3133122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	07.30.2020 18:46	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.31.2020 08:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.31.2020 08:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.31.2020 08:01	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.31.2020 08:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	07.31.2020 08:01	
o-Terphenyl	84-15-1	74	%	70-130	07.31.2020 08:01	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **EH @ 2'** Matrix: **Soil** Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-003 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: **AMF** % Moisture:
 Analyst: **AMF** Date Prep: 08.04.2020 10:00 Basis: **Wet Weight**
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.04.2020 19:30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.04.2020 19:30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.04.2020 19:30	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.04.2020 19:30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.04.2020 19:30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.04.2020 19:30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.04.2020 19:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.04.2020 19:30		
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.04.2020 19:30		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **EH @ 3'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-004 Date Collected: 07.27.2020 00:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.30.2020 15:45 Basis: Wet Weight
 Seq Number: 3133122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	94.4	5.00	mg/kg	07.30.2020 18:52		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.31.2020 08:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.31.2020 08:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.31.2020 08:19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.31.2020 08:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-130	07.31.2020 08:19	
o-Terphenyl	84-15-1	126	%	70-130	07.31.2020 08:19	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **EH @ 3'** Matrix: **Soil** Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-004 Date Collected: 07.27.2020 00:00 Sample Depth: 3 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: **AMF** % Moisture:
 Analyst: **AMF** Date Prep: 08.04.2020 10:00 Basis: **Wet Weight**
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.04.2020 19:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.04.2020 19:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.04.2020 19:50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.04.2020 19:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.04.2020 19:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.04.2020 19:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.04.2020 19:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.04.2020 19:50		
4-Bromofluorobenzene	460-00-4	111	%	70-130	08.04.2020 19:50		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **SH @ 2'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-005 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.30.2020 15:45 Basis: Wet Weight
 Seq Number: 3133122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	49.0	5.00	mg/kg	07.30.2020 18:58		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.31.2020 08:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.31.2020 08:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.31.2020 08:38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.31.2020 08:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	07.31.2020 08:38	
o-Terphenyl	84-15-1	122	%	70-130	07.31.2020 08:38	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **SH @ 2'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-005 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.04.2020 10:00 Basis: Wet Weight
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.04.2020 20:11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.04.2020 20:11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.04.2020 20:11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.04.2020 20:11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.04.2020 20:11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.04.2020 20:11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.04.2020 20:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	08.04.2020 20:11		
4-Bromofluorobenzene	460-00-4	122	%	70-130	08.04.2020 20:11		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **SH @ 3'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-006 Date Collected: 07.27.2020 00:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.31.2020 12:40 Basis: Wet Weight
 Seq Number: 3133291

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.5	5.04	mg/kg	07.31.2020 13:33		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.31.2020 08:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.31.2020 08:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.31.2020 08:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.31.2020 08:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	07.31.2020 08:56	
o-Terphenyl	84-15-1	123	%	70-130	07.31.2020 08:56	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **SH @ 3'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-006 Date Collected: 07.27.2020 00:00 Sample Depth: 3 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.04.2020 10:00 Basis: Wet Weight
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.04.2020 20:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.04.2020 20:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.04.2020 20:31	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.04.2020 20:31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.04.2020 20:31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.04.2020 20:31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.04.2020 20:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.04.2020 20:31		
4-Bromofluorobenzene	460-00-4	112	%	70-130	08.04.2020 20:31		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **WH @ 2'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-007 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.31.2020 12:40 Basis: Wet Weight
 Seq Number: 3133291

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	28.9	4.96	mg/kg	07.31.2020 13:52		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.31.2020 09:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.31.2020 09:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.31.2020 09:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.31.2020 09:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	07.31.2020 09:15	
o-Terphenyl	84-15-1	119	%	70-130	07.31.2020 09:15	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **WH @ 2'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-007 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.04.2020 10:00 Basis: Wet Weight
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.04.2020 21:53	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.04.2020 21:53	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.04.2020 21:53	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.04.2020 21:53	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.04.2020 21:53	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.04.2020 21:53	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.04.2020 21:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	112	%	70-130	08.04.2020 21:53		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.04.2020 21:53		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **WH @ 3'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-008 Date Collected: 07.27.2020 00:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.31.2020 12:40 Basis: Wet Weight
 Seq Number: 3133291

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	07.31.2020 13:58	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.31.2020 09:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.31.2020 09:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.31.2020 09:33	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.31.2020 09:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	07.31.2020 09:33	
o-Terphenyl	84-15-1	124	%	70-130	07.31.2020 09:33	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **WH @ 3'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-008 Date Collected: 07.27.2020 00:00 Sample Depth: 3 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.04.2020 10:00 Basis: Wet Weight
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.04.2020 22:13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.04.2020 22:13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.04.2020 22:13	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.04.2020 22:13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.04.2020 22:13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.04.2020 22:13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.04.2020 22:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.04.2020 22:13		
4-Bromofluorobenzene	460-00-4	121	%	70-130	08.04.2020 22:13		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL1 @ 6'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-009 Date Collected: 07.27.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.31.2020 12:40 Basis: Wet Weight
 Seq Number: 3133291

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	845	4.99	mg/kg	07.31.2020 14:04		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.31.2020 09:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.31.2020 09:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.31.2020 09:52	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.31.2020 09:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	07.31.2020 09:52	
o-Terphenyl	84-15-1	123	%	70-130	07.31.2020 09:52	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL1 @ 6'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-009 Date Collected: 07.27.2020 00:00 Sample Depth: 6 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.04.2020 10:00 Basis: Wet Weight
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.04.2020 22:34	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.04.2020 22:34	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.04.2020 22:34	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.04.2020 22:34	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.04.2020 22:34	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.04.2020 22:34	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.04.2020 22:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.04.2020 22:34		
4-Bromofluorobenzene	460-00-4	113	%	70-130	08.04.2020 22:34		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL2 @ 6'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-010 Date Collected: 07.27.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.31.2020 12:40 Basis: Wet Weight
 Seq Number: 3133291

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2250	25.3	mg/kg	07.31.2020 14:11		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.30.2020 17:00 Basis: Wet Weight
 Seq Number: 3133199

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.31.2020 10:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.31.2020 10:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.31.2020 10:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.31.2020 10:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	07.31.2020 10:10	
o-Terphenyl	84-15-1	122	%	70-130	07.31.2020 10:10	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL2 @ 6'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-010 Date Collected: 07.27.2020 00:00 Sample Depth: 6 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: AMF % Moisture:
 Analyst: AMF Date Prep: 08.04.2020 10:00 Basis: Wet Weight
 Seq Number: 3133525

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.04.2020 22:54	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.04.2020 22:54	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.04.2020 22:54	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.04.2020 22:54	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.04.2020 22:54	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.04.2020 22:54	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.04.2020 22:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	114	%	70-130	08.04.2020 22:54		
1,4-Difluorobenzene	540-36-3	109	%	70-130	08.04.2020 22:54		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL3 @ 6'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-011 Date Collected: 07.27.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.06.2020 16:21 Basis: Wet Weight
 Seq Number: 3133837

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9560	50.5	mg/kg	08.06.2020 18:45		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 11:00 Basis: Wet Weight
 Seq Number: 3133887

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.06.2020 20:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.06.2020 20:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.06.2020 20:12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.06.2020 20:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	08.06.2020 20:12	
o-Terphenyl	84-15-1	90	%	70-130	08.06.2020 20:12	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL3 @ 6'** Matrix: **Soil** Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-011 Date Collected: 07.27.2020 00:00 Sample Depth: 6 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.05.2020 08:00 Basis: Wet Weight
 Seq Number: 3133864

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.06.2020 19:40	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.06.2020 19:40	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.06.2020 19:40	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.06.2020 19:40	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.06.2020 19:40	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.06.2020 19:40	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.06.2020 19:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.06.2020 19:40		
1,4-Difluorobenzene	540-36-3	116	%	70-130	08.06.2020 19:40		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL4 @ 6'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-012 Date Collected: 07.27.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.07.2020 10:00 Basis: Wet Weight
 Seq Number: 3133962

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3560	25.2	mg/kg	08.07.2020 10:46		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.07.2020 01:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.07.2020 01:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.07.2020 01:27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.07.2020 01:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	08.07.2020 01:27	
o-Terphenyl	84-15-1	91	%	70-130	08.07.2020 01:27	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL4 @ 6'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-012 Date Collected: 07.27.2020 00:00 Sample Depth: 6 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.05.2020 08:00 Basis: Wet Weight
 Seq Number: 3133864

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.06.2020 20:00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.06.2020 20:00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.06.2020 20:00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.06.2020 20:00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.06.2020 20:00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.06.2020 20:00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.06.2020 20:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.06.2020 20:00		
1,4-Difluorobenzene	540-36-3	112	%	70-130	08.06.2020 20:00		



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL5 @ 2'** Matrix: Soil Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-013 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.07.2020 10:00 Basis: Wet Weight
 Seq Number: 3133962

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1090	4.98	mg/kg	08.07.2020 11:05		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.07.2020 01:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.07.2020 01:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.07.2020 01:48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.07.2020 01:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	08.07.2020 01:48	
o-Terphenyl	84-15-1	90	%	70-130	08.07.2020 01:48	



Certificate of Analytical Results 668592

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **FL5 @ 2'** Matrix: **Soil** Date Received: 07.30.2020 10:40
 Lab Sample Id: 668592-013 Date Collected: 07.27.2020 00:00 Sample Depth: 2 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.05.2020 08:00 Basis: Wet Weight
 Seq Number: 3133864

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.06.2020 20:21	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.06.2020 20:21	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.06.2020 20:21	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.06.2020 20:21	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.06.2020 20:21	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.06.2020 20:21	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.06.2020 20:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.06.2020 20:21		
1,4-Difluorobenzene	540-36-3	117	%	70-130	08.06.2020 20:21		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc

Serrano

Analytical Method: Chloride by EPA 300

Seq Number: 3133122

MB Sample Id: 7708419-1-BLK

Matrix: Solid

LCS Sample Id: 7708419-1-BKS

Prep Method: E300P

Date Prep: 07.30.2020

LCSD Sample Id: 7708419-1-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	268	107	268	107	90-110	0	20	mg/kg	07.30.2020 16:00	

Analytical Method: Chloride by EPA 300

Seq Number: 3133291

MB Sample Id: 7708495-1-BLK

Matrix: Solid

LCS Sample Id: 7708495-1-BKS

Prep Method: E300P

Date Prep: 07.31.2020

LCSD Sample Id: 7708495-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	260	104	261	104	90-110	0	20	mg/kg	07.31.2020 13:20	

Analytical Method: Chloride by EPA 300

Seq Number: 3133837

MB Sample Id: 7708886-1-BLK

Matrix: Solid

LCS Sample Id: 7708886-1-BKS

Prep Method: E300P

Date Prep: 08.06.2020

LCSD Sample Id: 7708886-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	261	104	261	104	90-110	0	20	mg/kg	08.06.2020 17:05	

Analytical Method: Chloride by EPA 300

Seq Number: 3133962

MB Sample Id: 7708930-1-BLK

Matrix: Solid

LCS Sample Id: 7708930-1-BKS

Prep Method: E300P

Date Prep: 08.07.2020

LCSD Sample Id: 7708930-1-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	240	96	240	96	90-110	0	20	mg/kg	08.07.2020 10:33	

Analytical Method: Chloride by EPA 300

Seq Number: 3133122

Parent Sample Id: 668553-001

Matrix: Soil

MS Sample Id: 668553-001 S

Prep Method: E300P

Date Prep: 07.30.2020

MSD Sample Id: 668553-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	278	248	550	110	539	105	90-110	2	20	mg/kg	07.30.2020 16:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3133122

Parent Sample Id: 668591-006

Matrix: Soil

MS Sample Id: 668591-006 S

Prep Method: E300P

Date Prep: 07.30.2020

MSD Sample Id: 668591-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	30.5	249	311	113	303	109	90-110	3	20	mg/kg	07.30.2020 17:44	X

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

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

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

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



Etech Environmental & Safety Solution, Inc

Serrano

Analytical Method: Chloride by EPA 300

Seq Number: 3133291

Parent Sample Id: 668592-006

Matrix: Soil

MS Sample Id: 668592-006 S

Prep Method: E300P

Date Prep: 07.31.2020

MSD Sample Id: 668592-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	21.5	252	261	95	276	101	90-110	6	20	mg/kg	07.31.2020 13:39	

Analytical Method: Chloride by EPA 300

Seq Number: 3133291

Parent Sample Id: 668610-001

Matrix: Soil

MS Sample Id: 668610-001 S

Prep Method: E300P

Date Prep: 07.31.2020

MSD Sample Id: 668610-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9340	2500	11700	94	11800	98	90-110	1	20	mg/kg	07.31.2020 15:08	

Analytical Method: Chloride by EPA 300

Seq Number: 3133837

Parent Sample Id: 669326-003

Matrix: Soil

MS Sample Id: 669326-003 S

Prep Method: E300P

Date Prep: 08.06.2020

MSD Sample Id: 669326-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	687	251	919	92	881	77	90-110	4	20	mg/kg	08.06.2020 17:21	X

Analytical Method: Chloride by EPA 300

Seq Number: 3133837

Parent Sample Id: 669327-006

Matrix: Soil

MS Sample Id: 669327-006 S

Prep Method: E300P

Date Prep: 08.06.2020

MSD Sample Id: 669327-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	684	252	904	87	906	88	90-110	0	20	mg/kg	08.06.2020 18:34	X

Analytical Method: Chloride by EPA 300

Seq Number: 3133962

Parent Sample Id: 668592-012

Matrix: Soil

MS Sample Id: 668592-012 S

Prep Method: E300P

Date Prep: 08.07.2020

MSD Sample Id: 668592-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3560	1260	4910	107	4910	107	90-110	0	20	mg/kg	08.07.2020 10:52	

Analytical Method: Chloride by EPA 300

Seq Number: 3133962

Parent Sample Id: 669427-009

Matrix: Soil

MS Sample Id: 669427-009 S

Prep Method: E300P

Date Prep: 08.07.2020

MSD Sample Id: 669427-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	65.0	253	304	94	304	94	90-110	0	20	mg/kg	08.07.2020 12:21	

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

Serrano

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133199

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.30.2020

MB Sample Id: 7708453-1-BLK

LCS Sample Id: 7708453-1-BKS

LCSD Sample Id: 7708453-1-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	942	94	1060	106	70-130	12	20	mg/kg	07.30.2020 22:20	
Diesel Range Organics (DRO)	<50.0	1000	890	89	1010	101	70-130	13	20	mg/kg	07.30.2020 22:20	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	105		126			124			70-130	%	07.30.2020 22:20	
o-Terphenyl	113		125			130			70-130	%	07.30.2020 22:20	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133887

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.06.2020

MB Sample Id: 7708923-1-BLK

LCS Sample Id: 7708923-1-BKS

LCSD Sample Id: 7708923-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	841	84	813	81	70-130	3	20	mg/kg	08.06.2020 11:40	
Diesel Range Organics (DRO)	<50.0	1000	858	86	837	84	70-130	2	20	mg/kg	08.06.2020 11:40	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	91		94			91			70-130	%	08.06.2020 11:40	
o-Terphenyl	91		95			91			70-130	%	08.06.2020 11:40	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133888

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.06.2020

MB Sample Id: 7708925-1-BLK

LCS Sample Id: 7708925-1-BKS

LCSD Sample Id: 7708925-1-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	824	82	838	84	70-130	2	20	mg/kg	08.06.2020 21:15	
Diesel Range Organics (DRO)	<50.0	1000	837	84	820	82	70-130	2	20	mg/kg	08.06.2020 21:15	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	88		89			96			70-130	%	08.06.2020 21:15	
o-Terphenyl	91		89			98			70-130	%	08.06.2020 21:15	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133199

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.30.2020

MB Sample Id: 7708453-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.30.2020 22:01	

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

Serrano

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133887

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.06.2020

MB Sample Id: 7708923-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.06.2020 11:19	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133888

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.06.2020

MB Sample Id: 7708925-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.06.2020 20:54	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133199

Matrix: Soil

Prep Method: SW8015P

Date Prep: 07.30.2020

Parent Sample Id: 668591-001

MS Sample Id: 668591-001 S

MSD Sample Id: 668591-001 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	936	94	947	95	70-130	1	20	mg/kg	07.30.2020 23:16	
Diesel Range Organics (DRO)	<49.9	997	881	88	895	90	70-130	2	20	mg/kg	07.30.2020 23:16	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		129		70-130	%	07.30.2020 23:16
o-Terphenyl	125		124		70-130	%	07.30.2020 23:16

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133887

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.06.2020

Parent Sample Id: 669268-001

MS Sample Id: 669268-001 S

MSD Sample Id: 669268-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	808	81	818	82	70-130	1	20	mg/kg	08.06.2020 12:44	
Diesel Range Organics (DRO)	<49.9	998	833	83	846	85	70-130	2	20	mg/kg	08.06.2020 12:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	87		89		70-130	%	08.06.2020 12:44
o-Terphenyl	85		88		70-130	%	08.06.2020 12:44

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

Serrano

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133888

Parent Sample Id: 669110-001

Matrix: Soil

MS Sample Id: 669110-001 S

Prep Method: SW8015P

Date Prep: 08.06.2020

MSD Sample Id: 669110-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	782	79	780	78	70-130	0	20	mg/kg	08.06.2020 22:18	
Diesel Range Organics (DRO)	<49.8	996	819	82	816	82	70-130	0	20	mg/kg	08.06.2020 22:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		90		70-130	%	08.06.2020 22:18
o-Terphenyl	89		88		70-130	%	08.06.2020 22:18

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133525

MB Sample Id: 7708682-1-BLK

Matrix: Solid

LCS Sample Id: 7708682-1-BKS

Prep Method: SW5035A

Date Prep: 08.04.2020

LCSD Sample Id: 7708682-1-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	0.114	114	0.110	110	70-130	4	35	mg/kg	08.04.2020 11:47	
Toluene	<0.00200	0.100	0.104	104	0.0958	96	70-130	8	35	mg/kg	08.04.2020 11:47	
Ethylbenzene	<0.00200	0.100	0.102	102	0.0914	91	70-130	11	35	mg/kg	08.04.2020 11:47	
m,p-Xylenes	<0.00400	0.200	0.201	101	0.178	89	70-130	12	35	mg/kg	08.04.2020 11:47	
o-Xylene	<0.00200	0.100	0.0975	98	0.0870	87	70-130	11	35	mg/kg	08.04.2020 11:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		101		102		70-130	%	08.04.2020 11:47
4-Bromofluorobenzene	88		99		88		70-130	%	08.04.2020 11:47

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133864

MB Sample Id: 7708946-1-BLK

Matrix: Solid

LCS Sample Id: 7708946-1-BKS

Prep Method: SW5035A

Date Prep: 08.05.2020

LCSD Sample Id: 7708946-1-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	0.0748	75	0.0900	90	70-130	18	35	mg/kg	08.06.2020 09:05	
Toluene	<0.00200	0.100	0.0868	87	0.103	103	70-130	17	35	mg/kg	08.06.2020 09:05	
Ethylbenzene	<0.00200	0.100	0.0959	96	0.113	113	70-130	16	35	mg/kg	08.06.2020 09:05	
m,p-Xylenes	<0.00400	0.200	0.195	98	0.229	115	70-130	16	35	mg/kg	08.06.2020 09:05	
o-Xylene	<0.00200	0.100	0.0951	95	0.111	111	70-130	15	35	mg/kg	08.06.2020 09:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		92		92		70-130	%	08.06.2020 09:05
4-Bromofluorobenzene	130		116		117		70-130	%	08.06.2020 09:05

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



Etech Environmental & Safety Solution, Inc

Serrano

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133525

Parent Sample Id: 668619-001

Matrix: Soil

MS Sample Id: 668619-001 S

Prep Method: SW5035A

Date Prep: 08.04.2020

MSD Sample Id: 668619-001 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	0.107	107	0.105	106	70-130	2	35	mg/kg	08.04.2020 13:42	
Toluene	<0.00200	0.0998	0.0727	73	0.0832	84	70-130	13	35	mg/kg	08.04.2020 13:42	
Ethylbenzene	<0.00200	0.0998	0.0567	57	0.0680	69	70-130	18	35	mg/kg	08.04.2020 13:42	X
m,p-Xylenes	<0.00399	0.200	0.106	53	0.139	70	70-130	27	35	mg/kg	08.04.2020 13:42	X
o-Xylene	<0.00200	0.0998	0.0513	51	0.0766	77	70-130	40	35	mg/kg	08.04.2020 13:42	XF

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		104		70-130	%	08.04.2020 13:42
4-Bromofluorobenzene	78		93		70-130	%	08.04.2020 13:42

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133864

Parent Sample Id: 668914-001

Matrix: Soil

MS Sample Id: 668914-001 S

Prep Method: SW5035A

Date Prep: 08.05.2020

MSD Sample Id: 668914-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00238	0.100	0.0825	80	0.0804	78	70-130	3	35	mg/kg	08.06.2020 10:25	
Toluene	0.00170	0.100	0.0945	93	0.0926	91	70-130	2	35	mg/kg	08.06.2020 10:25	
Ethylbenzene	<0.00200	0.100	0.106	106	0.103	104	70-130	3	35	mg/kg	08.06.2020 10:25	
m,p-Xylenes	<0.00401	0.200	0.218	109	0.210	106	70-130	4	35	mg/kg	08.06.2020 10:25	
o-Xylene	<0.00200	0.100	0.104	104	0.102	103	70-130	2	35	mg/kg	08.06.2020 10:25	

Surrogate

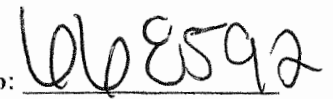
	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		90		70-130	%	08.06.2020 10:25
4-Bromofluorobenzene	124		121		70-130	%	08.06.2020 10:25

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

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

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

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





Chain of Custody

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

Work Order No:

W68592

www.xenco.com

Page

2

of 0

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

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

Project Name:		Turn Around		ANALYSIS REQUEST												Preservative Codes								
Project Number:		Routine: ☒														HNO3: HN								
Project Location:		Rush: ☐														H2S04: H2								
Sampler's Name:		Due Date:														HCL: HL								
PO #:																None: NO								
SAMPLE RECEIPT		Temp Blank: Yes No		Wet Ice: Yes No														NaOH: Na						
Temperature (°C):		Thermometer ID		MeOH: Me																				
Received Intact:		Yes No		Zn Acetate+ NaOH: Zn																				
Cooler Custody Seals:		Yes No N/A		TAT starts the day received by the lab, if received by 4:30pm																				
Sample Custody Seals:		Yes No N/A		Total Containers:														Sample Comments						
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chloride E300	BTEX 8021	TPH Modified Ext	TPH TX1005														
FL3@6'		Soil	7-27-20		6'		X	X	X															
FL4@6'		Soil	7-27-20		6'		X	X	X															
FL5@2'		Soil	7-27-20		2'		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 \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Stephanie Rojas	3:30 7/29	2	Stephanie Rojas	3:35 7/29
3			4		
5			6		

Revised Date 10/14/19 Rev. 2019.1

ORIGIN ID: H0BA
*MAIL SERVICES ETC
4008 N GRIMES
HOBBS, NM 88240
UNITED STATES US
JUL 20 2021
ACTWGT: 34.00 LB MAN
CAD: 0103352/CAFE3313
DIMS: 24x13x13 IN
BILL THIRD PARTY

TO XENCO HOLD FOR PICKUP
FEDEX EXPRESS SHIP CENTER
FEDEX EXPRESS SHIP CENTER
3600 COUNTY ROAD 1276 SOUTH
MIDLAND TX 79711
REF: DEPT:

(432) 704-5440
INV:
PO:



THU - 30 JUL HOLD
PRIORITY OVERNIGHT
HLD
MAFA
TX-US LBB

TRK# 9061 5134 6452
0201

41 MAFA



Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 07.30.2020 10.40.00 AM

Work Order #: 668592

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.4
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes BTEX was in bulk container
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 07.30.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.30.2020

Certificate of Analysis Summary 669582

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Serrano

Project Id: 12803
Contact: Joel Lowry
Project Location: Lea County, NM

Date Received in Lab: Mon 08.10.2020 10:01
Report Date: 08.14.2020 14:28
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669582-001	669582-002	669582-003	669582-004		
	<i>Field Id:</i>	NW	EW	SW	WW		
	<i>Depth:</i>	1- ft	1- ft	1- ft	1- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00		
BTEX by EPA 8021B	<i>Extracted:</i>	08.13.2020 08:15	08.13.2020 08:15	08.13.2020 08:15	08.13.2020 08:15		
	<i>Analyzed:</i>	08.13.2020 15:37	08.13.2020 16:59	08.13.2020 17:20	08.13.2020 17:41		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199		
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199		
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199		
m,p-Xylenes		<0.00401 0.00401	<0.00403 0.00403	<0.00398 0.00398	<0.00398 0.00398		
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199		
Total Xylenes		<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199		
Total BTEX		<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199		
Chloride by EPA 300	<i>Extracted:</i>	08.10.2020 16:40	08.10.2020 16:40	08.10.2020 16:40	08.10.2020 16:40		
	<i>Analyzed:</i>	08.10.2020 21:23	08.10.2020 21:29	08.10.2020 21:35	08.10.2020 21:42		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		2770 25.2	2180 25.0	1600 24.9	3900 25.0		
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 12:00	08.10.2020 12:00	08.10.2020 12:00	08.10.2020 12:00		
	<i>Analyzed:</i>	08.10.2020 21:44	08.10.2020 22:09	08.10.2020 22:33	08.10.2020 22:09		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9		
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9		
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9		
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9		

BRL - Below Reporting Limit

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





Environment Testing
Xenco

Analytical Report 669582

for

Etech Environmental & Safety Solution, Inc

Project Manager: Joel Lowry

Serrano

12803

08.14.2020

Collected By: Client



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

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

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

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



08.14.2020

Project Manager: **Joel Lowry**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **669582**

Serrano

Project Address: Lea County, NM

Joel Lowry:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 669582. 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. 669582 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 669582****Etech Environmental & Safety Solution, Inc, Midland, TX**

Serrano

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NW	S	08.06.2020 00:00	1 ft	669582-001
EW	S	08.06.2020 00:00	1 ft	669582-002
SW	S	08.06.2020 00:00	1 ft	669582-003
WW	S	08.06.2020 00:00	1 ft	669582-004



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Serrano

Project ID: 12803
Work Order Number(s): 669582

Report Date: 08.14.2020
Date Received: 08.10.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 669582

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **NW** Matrix: **Soil** Date Received: 08.10.2020 10:01
 Lab Sample Id: 669582-001 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: **CHE** % Moisture:
 Analyst: **CHE** Date Prep: 08.10.2020 16:40 Basis: **Wet Weight**
 Seq Number: 3134094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2770	25.2	mg/kg	08.10.2020 21:23		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: **DVM** % Moisture:
 Analyst: **ARM** Date Prep: 08.10.2020 12:00 Basis: **Wet Weight**
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 21:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 21:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 21:44	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 21:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	08.10.2020 21:44	
o-Terphenyl	84-15-1	92	%	70-130	08.10.2020 21:44	



Certificate of Analytical Results 669582

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **NW** Matrix: **Soil** Date Received: 08.10.2020 10:01
 Lab Sample Id: 669582-001 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: **KTL** % Moisture:
 Analyst: **KTL** Date Prep: 08.13.2020 08:15 Basis: **Wet Weight**
 Seq Number: 3134537

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.13.2020 15:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.13.2020 15:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.13.2020 15:37	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.13.2020 15:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.13.2020 15:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.13.2020 15:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.13.2020 15:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	70-130	08.13.2020 15:37		
1,4-Difluorobenzene	540-36-3	116	%	70-130	08.13.2020 15:37		



Certificate of Analytical Results 669582

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **EW** Matrix: **Soil** Date Received: 08.10.2020 10:01
 Lab Sample Id: 669582-002 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: **CHE** % Moisture:
 Analyst: **CHE** Date Prep: 08.10.2020 16:40 Basis: **Wet Weight**
 Seq Number: 3134094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2180	25.0	mg/kg	08.10.2020 21:29		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: **DVM** % Moisture:
 Analyst: **ARM** Date Prep: 08.10.2020 12:00 Basis: **Wet Weight**
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.10.2020 22:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.10.2020 22:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.10.2020 22:09	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.10.2020 22:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	08.10.2020 22:09	
o-Terphenyl	84-15-1	100	%	70-130	08.10.2020 22:09	



Certificate of Analytical Results 669582

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **EW** Matrix: **Soil** Date Received: 08.10.2020 10:01
 Lab Sample Id: 669582-002 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.13.2020 08:15 Basis: Wet Weight
 Seq Number: 3134537

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.13.2020 16:59	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.13.2020 16:59	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.13.2020 16:59	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.13.2020 16:59	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.13.2020 16:59	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.13.2020 16:59	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.13.2020 16:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	08.13.2020 16:59		
4-Bromofluorobenzene	460-00-4	94	%	70-130	08.13.2020 16:59		



Certificate of Analytical Results 669582

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **SW** Matrix: **Soil** Date Received: 08.10.2020 10:01
 Lab Sample Id: 669582-003 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: **CHE** % Moisture:
 Analyst: **CHE** Date Prep: 08.10.2020 16:40 Basis: **Wet Weight**
 Seq Number: 3134094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1600	24.9	mg/kg	08.10.2020 21:35		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: **DVM** % Moisture:
 Analyst: **ARM** Date Prep: 08.10.2020 12:00 Basis: **Wet Weight**
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.10.2020 22:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.10.2020 22:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.10.2020 22:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.10.2020 22:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	08.10.2020 22:33	
o-Terphenyl	84-15-1	90	%	70-130	08.10.2020 22:33	



Certificate of Analytical Results 669582

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **SW** Matrix: **Soil** Date Received: 08.10.2020 10:01
 Lab Sample Id: 669582-003 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.13.2020 08:15 Basis: Wet Weight
 Seq Number: 3134537

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.13.2020 17:20	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.13.2020 17:20	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.13.2020 17:20	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.13.2020 17:20	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.13.2020 17:20	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.13.2020 17:20	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.13.2020 17:20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	08.13.2020 17:20		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.13.2020 17:20		



Certificate of Analytical Results 669582

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **WW** Matrix: Soil Date Received: 08.10.2020 10:01
 Lab Sample Id: 669582-004 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.10.2020 16:40 Basis: Wet Weight
 Seq Number: 3134094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3900	25.0	mg/kg	08.10.2020 21:42		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.10.2020 12:00 Basis: Wet Weight
 Seq Number: 3134152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 22:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 22:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 22:09	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 22:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	08.10.2020 22:09	
o-Terphenyl	84-15-1	93	%	70-130	08.10.2020 22:09	



Certificate of Analytical Results 669582

Etech Environmental & Safety Solution, Inc, Midland, TX Serrano

Sample Id: **WW** Matrix: Soil Date Received: 08.10.2020 10:01
 Lab Sample Id: 669582-004 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 08.13.2020 08:15 Basis: Wet Weight
 Seq Number: 3134537

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.13.2020 17:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.13.2020 17:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.13.2020 17:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.13.2020 17:41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.13.2020 17:41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.13.2020 17:41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.13.2020 17:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.13.2020 17:41		
1,4-Difluorobenzene	540-36-3	117	%	70-130	08.13.2020 17:41		



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc

Serrano

Analytical Method: Chloride by EPA 300

Seq Number: 3134094

MB Sample Id: 7709100-1-BLK

Matrix: Solid

LCS Sample Id: 7709100-1-BKS

Prep Method: E300P

Date Prep: 08.10.2020

LCSD Sample Id: 7709100-1-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	267	107	267	107	90-110	0	20	mg/kg	08.10.2020 20:06	

Analytical Method: Chloride by EPA 300

Seq Number: 3134094

Parent Sample Id: 669564-001

Matrix: Soil

MS Sample Id: 669564-001 S

Prep Method: E300P

Date Prep: 08.10.2020

MSD Sample Id: 669564-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1800	1240	3130	107	3130	107	90-110	0	20	mg/kg	08.10.2020 21:54	

Analytical Method: Chloride by EPA 300

Seq Number: 3134094

Parent Sample Id: 669576-004

Matrix: Soil

MS Sample Id: 669576-004 S

Prep Method: E300P

Date Prep: 08.10.2020

MSD Sample Id: 669576-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	49.7	250	334	114	332	113	90-110	1	20	mg/kg	08.10.2020 20:25	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134152

MB Sample Id: 7709122-1-BLK

Matrix: Solid

LCS Sample Id: 7709122-1-BKS

Prep Method: SW8015P

Date Prep: 08.10.2020

LCSD Sample Id: 7709122-1-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	845	85	874	87	70-130	3	20	mg/kg	08.10.2020 12:18	
Diesel Range Organics (DRO)	<50.0	1000	839	84	915	92	70-130	9	20	mg/kg	08.10.2020 12:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		94		92		70-130	%	08.10.2020 12:18
o-Terphenyl	106		104		99		70-130	%	08.10.2020 12:18

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134154

MB Sample Id: 7709123-1-BLK

Matrix: Solid

LCS Sample Id: 7709123-1-BKS

Prep Method: SW8015P

Date Prep: 08.10.2020

LCSD Sample Id: 7709123-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	866	87	865	87	70-130	0	20	mg/kg	08.10.2020 12:18	
Diesel Range Organics (DRO)	<50.0	1000	927	93	849	85	70-130	9	20	mg/kg	08.10.2020 12:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		104		97		70-130	%	08.10.2020 12:18
o-Terphenyl	96		96		89		70-130	%	08.10.2020 12:18

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

Serrano

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134152

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.10.2020

MB Sample Id: 7709122-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.10.2020 11:54	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134154

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.10.2020

MB Sample Id: 7709123-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.10.2020 11:54	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134152

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.10.2020

Parent Sample Id: 669580-001

MS Sample Id: 669580-001 S

MSD Sample Id: 669580-001 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)	<50.0	999	783	78	786	79	70-130	0	20	mg/kg	08.10.2020 13:28	
Diesel Range Organics (DRO)	<50.0	999	848	85	834	84	70-130	2	20	mg/kg	08.10.2020 13:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		93		70-130	%	08.10.2020 13:28
o-Terphenyl	89		103		70-130	%	08.10.2020 13:28

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134154

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.10.2020

Parent Sample Id: 669576-001

MS Sample Id: 669576-001 S

MSD Sample Id: 669576-001 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)	<50.0	999	811	81	792	79	70-130	2	20	mg/kg	08.10.2020 13:28	
Diesel Range Organics (DRO)	<50.0	999	838	84	779	78	70-130	7	20	mg/kg	08.10.2020 13:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	82		81		70-130	%	08.10.2020 13:28
o-Terphenyl	75		72		70-130	%	08.10.2020 13:28

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

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

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

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



Etech Environmental & Safety Solution, Inc

Serrano

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134537

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.13.2020

MB Sample Id: 7709442-1-BLK

LCS Sample Id: 7709442-1-BKS

LCSD Sample Id: 7709442-1-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	0.105	105	70-130	3	35	mg/kg	08.13.2020 09:00	
Toluene	<0.00200	0.100	0.0967	97	0.0967	97	70-130	0	35	mg/kg	08.13.2020 09:00	
Ethylbenzene	<0.00200	0.100	0.0956	96	0.0942	94	70-130	1	35	mg/kg	08.13.2020 09:00	
m,p-Xylenes	<0.00400	0.200	0.191	96	0.186	93	70-130	3	35	mg/kg	08.13.2020 09:00	
o-Xylene	<0.00200	0.100	0.0929	93	0.0911	91	70-130	2	35	mg/kg	08.13.2020 09:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		99		101		70-130	%	08.13.2020 09:00
4-Bromofluorobenzene	90		98		95		70-130	%	08.13.2020 09:00

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134537

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.13.2020

Parent Sample Id: 669566-008

MS Sample Id: 669566-008 S

MSD Sample Id: 669566-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.101	101	0.104	104	70-130	3	35	mg/kg	08.13.2020 09:41	
Toluene	<0.00200	0.0998	0.0835	84	0.0810	81	70-130	3	35	mg/kg	08.13.2020 09:41	
Ethylbenzene	<0.00200	0.0998	0.0699	70	0.0662	66	70-130	5	35	mg/kg	08.13.2020 09:41	X
m,p-Xylenes	<0.00399	0.200	0.134	67	0.122	61	70-130	9	35	mg/kg	08.13.2020 09:41	X
o-Xylene	<0.00200	0.0998	0.0664	67	0.0607	61	70-130	9	35	mg/kg	08.13.2020 09:41	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		107		70-130	%	08.13.2020 09:41
4-Bromofluorobenzene	94		95		70-130	%	08.13.2020 09:41

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

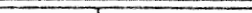
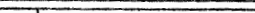
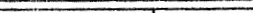
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747,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

Page 7 of 7

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

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	SiO ₂	Na	Sr	Tl	Sn	U	V	Zn		
Circle Method(s) and Metal(s) to be analyzed			TCLP / SPLP 6010:		8RCRA		Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Tl	U													
																									1631 / 245.1 / 7470 / 7471 :	Hg									

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

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

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 08.10.2020 10.01.00 AM

Work Order #: 669582

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

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

BTEX was in bulk container

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 08.10.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.10.2020

Certificate of Analysis Summary 683552

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Serrano SWD 6-1 2020

Project Id: 12803
Contact: PM
Project Location: Rural Lea County, NM

Date Received in Lab: Wed 01.06.2021 12:42
Report Date: 01.11.2021 09:49
Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 683552-001 Field Id: Deep Well Depth: Matrix: WATER Sampled: 01.04.2021 00:00					
Chloride by EPA 300	Extracted: 01.06.2021 16:10 Analyzed: 01.06.2021 23:51 Units/RL: mg/L RL					
Chloride	282 5.00					
TDS by SM2540C	Extracted: Analyzed: 01.08.2021 13:44 Units/RL: mg/L RL					
Total Dissolved Solids	1580 5.00					

BRL - Below Reporting Limit

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



Analytical Report 683552

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Serrano SWD 6-1 2020

12803

01.11.2021

Collected By: Client



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

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

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

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



01.11.2021

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **683552**

Serrano SWD 6-1 2020

Project Address: Rural 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) 683552. 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. 683552 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 683552

Etech Environmental & Safety Solution, Inc, Midland, TX

Serrano SWD 6-1 2020

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Deep Well	W	01.04.2021 00:00		683552-001



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Serrano SWD 6-1 2020

Project ID: 12803
Work Order Number(s): 683552

Report Date: 01.11.2021
Date Received: 01.06.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

**Certificate of Analytical Results 683552****Etech Environmental & Safety Solution, Inc, Midland, TX**

Serrano SWD 6-1 2020

Sample Id: **Deep Well**

Matrix: Water

Date Received: 01.06.2021 12:42

Lab Sample Id: 683552-001

Date Collected: 01.04.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 16:10

% Moisture:

Seq Number: 3146976

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	282	5.00	mg/L	01.06.2021 23:51		10

Analytical Method: TDS by SM2540C

Tech: SPC

Analyst: SPC

% Moisture:

Seq Number: 3147164

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Total Dissolved Solids	1642222	1580	5.00	mg/L	01.08.2021 13:44		1



Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Etech Environmental & Safety Solution, Inc
Serrano SWD 6-1 2020

Analytical Method: Chloride by EPA 300

Seq Number: 3146976

MB Sample Id: 7718568-1-BLK

Matrix: Water

LCS Sample Id: 7718568-1-BKS

Prep Method: E300P

Date Prep: 01.06.2021

LCSD Sample Id: 7718568-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.500	25.0	25.6	102	25.6	102	90-110	0	20	mg/L	01.06.2021 22:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3146976

Parent Sample Id: 683411-001

Matrix: Drinking Water

MS Sample Id: 683411-001 S

Prep Method: E300P

Date Prep: 01.06.2021

MSD Sample Id: 683411-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.37	25.0	28.6	109	27.8	106	90-110	3	20	mg/L	01.06.2021 22:46	

Analytical Method: TDS by SM2540C

Seq Number: 3147164

MB Sample Id: 3147164-1-BLK

Matrix: Water

LCS Sample Id: 3147164-1-BKS

LCSD Sample Id: 3147164-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	<5.00	1000	1010	101	1060	106	80-120	5	10	mg/L	01.08.2021 13:44	

Analytical Method: TDS by SM2540C

Seq Number: 3147164

Parent Sample Id: 683552-001

Matrix: Water

MD Sample Id: 683552-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Total Dissolved Solids	1580	1640	4	10	mg/L	01.08.2021 13:44	

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

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

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

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



Chain of Custody

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

Work Order No:

~~683555~~
683552

www.xenco.com

Page 1 of 1

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

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

[illegible]

Total 200.7 / 6010 200.8 / 6020:

8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Tl	Sn	U	V	Zn
-------	-------	----------	----	----	----	----	----	---	----	----	----	----	----	----	----	----	----	----	----	---	----	----	------------------	----	----	----	----	---	---	----

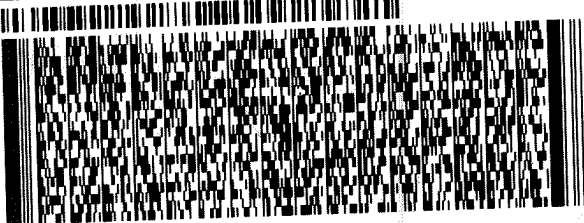
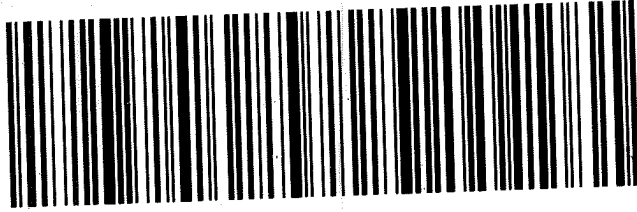
Circle Method(s) and Metal(s) to be analyzed

~~TCLP / SPLP 0010: 09CRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U~~

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$6 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
1		Armida Bustillo	2:47/1-5	2	01/06/21
3				4	
5				6	1242

GRIMES ETC HOBBS, NM 88240 UNITED STATES US		05JAN21 3.00 LB MAN CAD: 0103352/CAFE3313 DIMS: 13x12x12 IN BILL RECIPIENT	
TO XENCO HOLD FOR PICKUP XENCO HOLD FOR PICKUP 3600 S COUNTY RD MIDLAND TX 79706 (432) 704-5440 INV: REF: DEPT:			
		FedEx Express 	
TRK# 9401 5656 1558 0201		WED - 06 JAN 4:30P STANDARD OVERNIGHT	
41 MAFA		79706 TX-US LBB	
Part # 156148-134 RY EXP 01/21			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 01.06.2021 12.42.00 PM

Work Order #: 683552

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst: JKR

PH Device/Lot#: 10BDH1991

Checklist completed by:



Brianna Teel

Date: 01.06.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.06.2021

Appendix D

Photographic Log

Photographic Log

Photo Number: 1	
Photo Direction: East	
Photo Description: Point of Release	

Photo Number: 2	
Photo Direction: South	
Photo Description: Excavation	

Photographic Log

Photo Number: 3	 Jul 27, 2020 at 9:14:27 AM +32.279660, -103.372776 ±5.00m 15° N
Photo Direction: North-Northeast	
Photo Description: Excavation	

District I

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

District II

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

District III

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

District IV

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

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

CONDITIONS

Action 14768

CONDITIONS OF APPROVAL

Operator: GOODNIGHT MIDSTREAM PERMIAN, L Suite 850 Dallas, TX75206	5910 North Central Expressway	OGRID: 372311	Action Number: 14768	Action Type: C-141
OCD Reviewer kcollins	Condition None			