State of New Mexico
Oil Conservation Division

Incident ID	
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: _____ Title: _____

Signature: _____ Date: 7-24-23

email: _____ Telephone: 432-687-7108

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: Brittany Hall Date: 7/25/2023

Printed Name: Brittany Hall Title: Environmental Specialist

Environmental & Safety Solutions, Inc.

CLOSURE REQUEST REPORT

Benson Shugart Waterflood Unit #015

Eddy County, New Mexico

Incident Number nMLB0526441458

Prepared For:

Chevron USA, Inc.

6301 Deauville Blvd.

Midland, TX 79706

Carlsbad ● Midland ● San Antonio ● Lubbock ● Hobbs ● Lafayette

SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Chevron USA, Inc (Chevron), presents the following Closure Request Report (CRR) detailing excavation activities and subsequent soil sampling activities in accordance with an approved Remediation Work Plan (RWP) for an inadvertent release of produced water at the Benson Shugart Waterflood Unit #015 (Site). Based on completed remedial actions and laboratory analytical results from recent soil sampling events, Chevron is requesting No Further Action (NFA) at the Site.

SITE LOCATION AND BACKGROUND

The Site is located in Unit L, Section 25, Township 18 South, Range 30 East, in Eddy County, New Mexico (32.715339° N, 103.930783° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management. (**Figure 1** in **Appendix A**).

On August 14, 2005, a pipeline failure caused the release of approximately 200 barrels (bbls) of produced water into the pasture along a lease road. Vacuum trucks recovered approximately 150 bbls of free-standing fluids. Chevron reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on August 25, 2005, and was subsequently assigned Incident Number nMLB0526441458. **Figure 2** in **Appendix A** depicts the observed release area, hereafter referred to as the Area of Concern (AOC).

Between January 5 and April 11, 2022, Etech conducted a site assessment and follow up delineation activities to assess the presence and/or absence of impacts at the Site. A RWP was prepared by Etech to address residual impacts based on laboratory analytical results from delineation activities that exceeded the Site Closure Criteria. The RWP was approved by the NMOCD on December 8, 2022.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

As previously described in the approved RWP, the Site was characterized according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC) considering depth to groundwater and the proximity to:

- Any continuously flowing watercourse or any other significant watercourse;
- Any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- An occupied permanent residence, school, hospital, institution or church;
- A spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;
- Any freshwater well or spring;
- Incorporated municipal boundaries or a defined municipal fresh water well field covered under a municipal ordinance;
- A wetland;
- A subsurface mine;
- An unstable area (i.e. high karst potential); and
- A 100-year floodplain.

The closest well with data is United States Geological Survey (USGS) well 324244103561601, located approximately 0.31 miles west of the Site. The well has a reported depth to groundwater of 183.99 feet below ground surface (bgs) from 1994. Based on this information and findings from the regional water well data review, groundwater depth at the Site is estimated to be greater than 100 feet bgs. All well records referenced for depth to groundwater determination are included in **Appendix B**.

Based on the desktop review of the current BLM Carlsbad Field Office (CFO) karst cave potential map, this Site is located in a high potential karst area. All other potential receptors are not within the established buffers in NMAC 19.15.29.12. Receptor details from the site characterization are included in **Figure 1** in **Appendix A**.

Based on the results from the desktop review (specifically the BLM CFO karst designation) and estimated regional depth to groundwater at the Site, the following Closure Criteria was applied:

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria
Chloride	(Environmental Protection Agency) EPA 300.0	600 milligrams per kilogram (mg/kg)
Total Petroleum Hydrocarbon (TPH)	EPA 8015 M/D	100 mg/kg
Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

EXCAVATION SOIL SAMPLING ACTIVITIES

From March 14 through March 23, 2023, Etech personnel began excavating identified impacts based on laboratory analytical results and visual observations via mechanical equipment. Excavation activities were driven by field screening soil samples for volatile organic hydrocarbons using a photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

Following the removal of soil, Etech collected 5-point composite confirmation excavation soil samples at a sampling frequency of 200 square feet from the excavation floor and sidewalls. The 5-point composite samples were comprised of five equivalent aliquots homogenized in a 1-gallon, resealable plastic bag. Each sidewall sample depth represents the approximate average depth from which the five aliquots were collected. Floor samples were collected from a depth range of 4 feet and 8 feet bgs. The samples were then placed into lab provided pre-cleaned glass jars, packaged with minimal void space, labeled, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Permian Basin Environmental Laboratory (PBELAB) in Midland, Texas, for analysis of COCs. The location of confirmation excavation soil samples is shown in **Figure 2** in **Appendix A**.

Based on laboratory analytical results for soil samples Bottom Hole (BH) 4, BH13, BH15, BH16, BH19, South Sidewall (SS) 2, SS3, and SS5, which indicated elevated chloride concentrations ranging from 612 mg/kg to 1,360 mg/kg, additional remediation appeared warranted.

From April 24 through April 25, 2023, Etech resumed excavation activities based on elevated chloride concentrations identified by laboratory analytical results. Excavation activities were driven by field screening soil samples for volatile organic hydrocarbons and chloride, as previously described. Following additional soil removal, composite confirmation excavation soil samples were collected from the new excavation floors and sidewalls, handled, and analyzed for chloride as previously described.

Impacted soil was removed from the Site and transported to a licensed and approved New Mexico landfill. Upon receipt of the final confirmation excavation soil samples results, the excavation was backfilled with clean, locally sourced soil and the Site was restored to “as close to its original state” as possible. Photographic documentation of excavation activities is included in **Appendix C**.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all final confirmation excavation soil samples indicated all analyzed COCs were below the Site Closure Criteria. Laboratory analytical results are summarized in **Table 1** included in **Appendix D**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix E**.

SITE CLOSURE REQUEST

Based on laboratory analytical results for confirmation excavation soil samples, Chevron believes residual soil impacts associated with the inadvertent release have been excavated and removed from the Site. COCs concentrations for all final excavation confirmation soil samples were below the Site Closure Criteria. As such, NFA appears warranted at this time and Incident Number nMLB0526441458 should be respectfully considered for Closure by the NMOCD. Chevron believes the completed remedial actions have mitigated impacts at the Site and the requirements set forth in NMAC guidelines and be protective of human health, the environment, and groundwater.

If you have any questions or comments, please do not hesitate to contact Blake Estep at (432) 894-6038 or blake@etechenv.com. Previous remediation activities and soil sample analytical results for the subject release can be referenced in the original RWP in **Appendix F.**

Sincerely,
Etech Environmental and Safety Solutions, Inc.

Blake Estep
Project Manager

cc: Amy Barnhill, Chevron
New Mexico Oil Conservation Division
Bureau of Land Management

Appendices:

Appendix A: Figure 1: Site Map
Figure 2: Excavation Soil Sample Locations
Appendix B: Referenced Well Records
Appendix C: Photographic Log
Appendix D: Tables
Appendix E: Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix F: Approved Remediation Work Plan

APPENDIX A

Figures

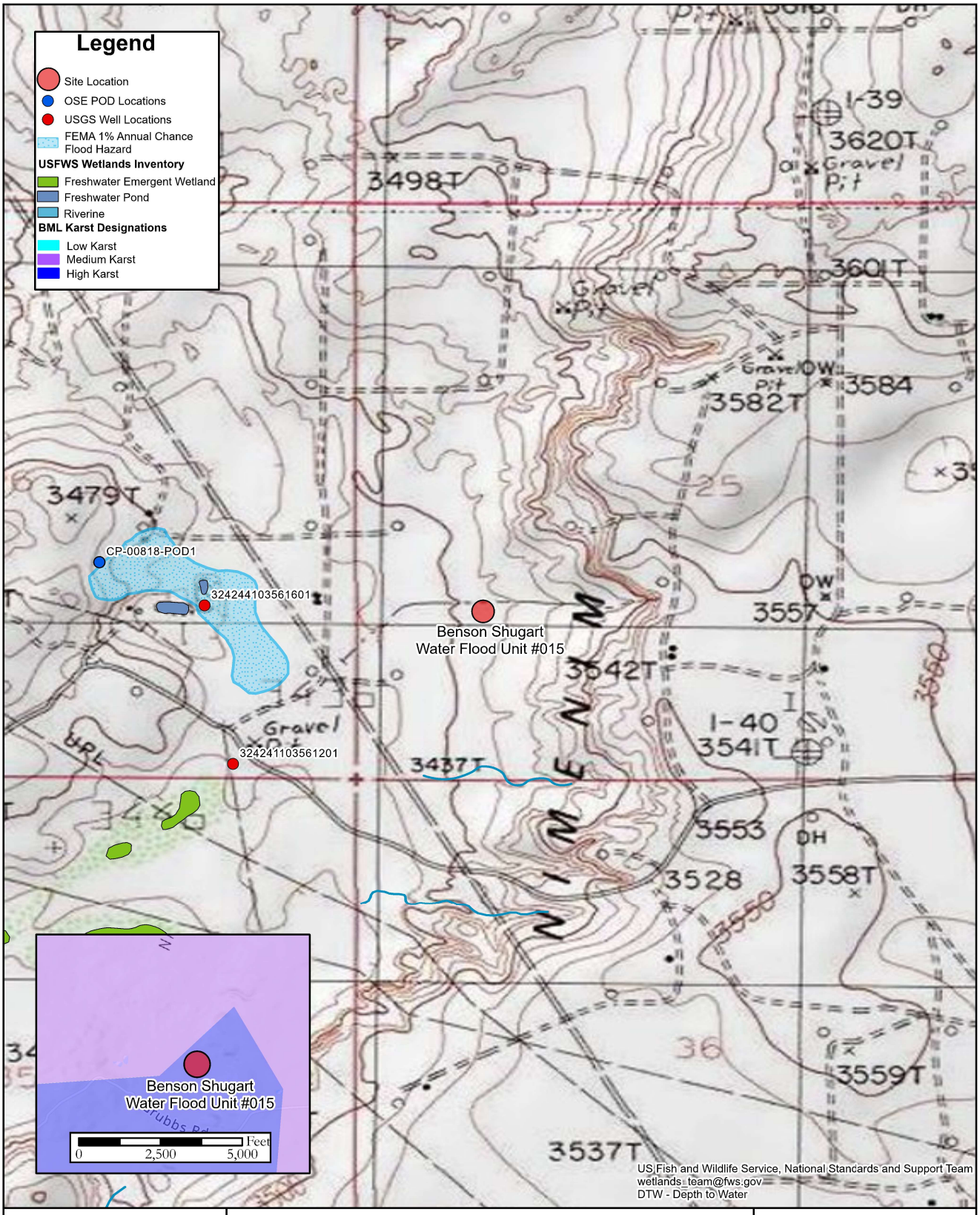

FIGURE 1

Site Map

Chevron USA, Inc.
Benson Shugart Water Flood Unit #015
Unit L Sec 25 T18S R30E
Eddy County, New Mexico

N

Feet
0 500 1,000

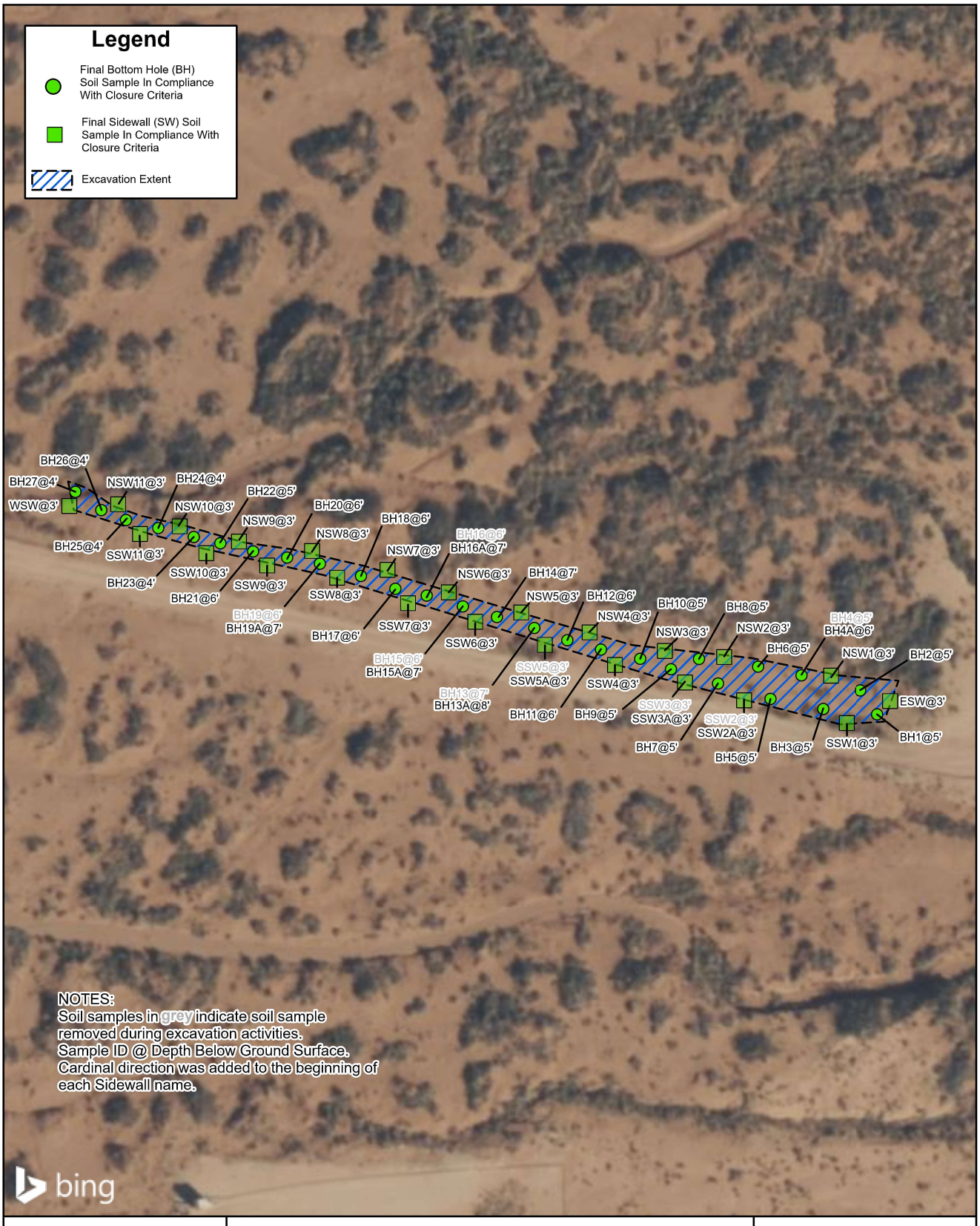

FIGURE 2

Excavation Soil Sample Locations

Chevron USA INC.
Benson Shugart Waterflood Unit #015
Unit L Sec 25 T18S R30E
Eddy County, New Mexico

N

0 60 120 Feet

APPENDIX B

Referenced Well Records

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 324244103561601

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

USGS 324244103561601 18S.30E.26.414144

Eddy County, New Mexico
Latitude 32°42'55.8", Longitude 103°56'16.4" NAD83
Land-surface elevation 3,431 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1976-05-28		D	62610		3235.07	NGVD29	1	Z		
1976-05-28		D	62611		3236.61	NAVD88	1	Z		
1976-05-28		D	72019	194.39			1	Z		
1983-04-12		D	62610		3243.42	NGVD29	1	Z		
1983-04-12		D	62611		3244.96	NAVD88	1	Z		
1983-04-12		D	72019	186.04			1	Z		
1990-10-10		D	62610		3246.44	NGVD29	1	S		
1990-10-10		D	62611		3247.98	NAVD88	1	S		
1990-10-10		D	72019	183.02			1	S		
1994-03-16		D	62610		3245.47	NGVD29	1	S		
1994-03-16		D	62611		3247.01	NAVD88	1	S		
1994-03-16		D	72019	183.99			1	S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day

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

Questions or Comments
Automated retrievals
Help
Data Tips
Explanation of terms
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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: 2023-06-27 17:50:44 EDT
0.29 0.25 nadww02

APPENDIX C

Photographic Log

PHOTOGRAPHIC LOG

Chevron USA, Inc.

Benson Shugart Waterflood Unit #015

Incident Number: nMLB0526441458

Photograph 1	**Date: 01/05/2022**

Description: Western view during Site assesment and delineation event.

Photograph 2	**Date: 01/05/2022**

Description: Western view during Site assesment and delineation event.

eTECH

PHOTOGRAPHIC LOG

Chevron USA, Inc.

Benson Shugart Waterflood Unit #015

Incident Number: nMLB0526441458

Photograph 3	Date: 01/05/2022

Description: Eastern view during Site assessment and delineation event.

Photograph 4	Date: 01/05/2022

Description: Eastern view during Site assessment and delineation event.

PHOTOGRAPHIC LOG

Chevron USA, Inc.

Benson Shugart Waterflood Unit #015

Incident Number: nMLB0526441458

Photograph 5	**Date: 03/23/2023**

Description: Western view during excavation activities.

Photograph 6	**Date: 03/23/2023**

Description: Western view during excavation activies.

PHOTOGRAPHIC LOG

Chevron USA, Inc.

Benson Shugart Waterflood Unit #015

Incident Number: nMLB0526441458

Photograph 7	Date: 03/23/2023

Description: Western view during excavation activities.

Photograph 8	Date: 05/19/2023

Description: Western view following remediation activities.

PHOTOGRAPHIC LOG

Chevron USA, Inc.

Benson Shugart Waterflood Unit #015

Incident Number: nMLB0526441458

Photograph 9	**Date: 05/19/2023**

Description: Western view following remediation activities.

Photograph 10	**Date: 05/19/2023**

Description: Western view following remediation activities.

PHOTOGRAPHIC LOG

Chevron USA, Inc.

Benson Shugart Waterflood Unit #015

Incident Number: nMLB0526441458

Photograph 11	**Date: 05/19/2023**

Description: Eastern view following remediation activities.

Photograph 12	**Date: 05/19/2023**

Description: Eastern view following remediation activities.

APPENDIX D

Tables

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Chevron USA, Inc. - Benson Shugart Waterflood Unit #015
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	100	600
Excavation Soil Samples - Incident Number nMLB0526441458									
Bottom Hole 1	03/23/2023	5	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	423
Bottom Hole 2	03/23/2023	5	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	253
Bottom Hole 3	03/23/2023	5	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	527
Bottom Hole 4	03/23/2023	5	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	932
Bottom Hole 4A	04/25/2023	6	NA	NA	NA	NA	NA	NA	164
Bottom Hole 5	03/23/2023	5	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	441
Bottom Hole 6	03/23/2023	5	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	362
Bottom Hole 7	03/23/2023	5	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	146
Bottom Hole 8	03/23/2023	5	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	55.5
Bottom Hole 9	03/23/2023	5	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	116
Bottom Hole 10	03/23/2023	5	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	104
Bottom Hole 11	03/23/2023	6	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	113
Bottom Hole 12	03/23/2023	6	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	424
Bottom Hole 13	03/23/2023	7	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	1,360
Bottom Hole 13A	04/25/2023	8	NA	NA	NA	NA	NA	NA	12.9
Bottom Hole 14	03/23/2023	7	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	173
Bottom Hole 15	03/23/2023	7	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	674
Bottom Hole 15A	04/25/2023	8	NA	NA	NA	NA	NA	NA	14.5
Bottom Hole 16	03/23/2023	6	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	1,140
Bottom Hole 16A	04/25/2023	7	NA	NA	NA	NA	NA	NA	42.6
Bottom Hole 17	03/23/2023	6	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	540
Bottom Hole 18	03/23/2023	6	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	514
Bottom Hole 19	03/23/2023	6	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	612
Bottom Hole 19A	04/25/2023	7	NA	NA	NA	NA	NA	NA	16.3
Bottom Hole 20	03/23/2023	6	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	313
Bottom Hole 21	03/23/2023	6	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	396
Bottom Hole 22	03/23/2023	5	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	337

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Chevron USA, Inc. - Benson Shugart Waterflood Unit #015
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	100	600
Excavation Soil Samples - Incident Number nMLB0526441458									
Bottom Hole 23	03/23/2023	4	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	163
Bottom Hole 24	03/23/2023	4	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	153
Bottom Hole 25	03/23/2023	4	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	81.6
Bottom Hole 26	03/23/2023	4	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	454
Bottom Hole 27	03/23/2023	4	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	296
North Sidewall 1	03/23/2023	3	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	476
North Sidewall 2	03/23/2023	3	<0.00105	<0.00105	<26.3	<26.3	<26.3	<26.3	78.0
North Sidewall 3	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	93.2
North Sidewall 4	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	19.3
North Sidewall 5	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	104
North Sidewall 6	03/23/2023	3	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	93.1
North Sidewall 7	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	99.0
North Sidewall 8	03/23/2023	3	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	13.8
North Sidewall 9	03/23/2023	3	<0.00105	<0.00105	<26.3	<26.3	<26.3	<26.3	151
North Sidewall 10	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	212
North Sidewall 11	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	390
East Sidewall	03/23/2023	3	<0.00105	<0.00105	<26.3	<26.3	<26.3	<26.3	585
South Sidewall 1	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	131
South Sidewall 2	03/23/2023	3	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	774
South Sidewall 2A	04/25/2023	3	NA	NA	NA	NA	NA	NA	17.9
South Sidewall 3	03/23/2023	3	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	740
South Sidewall 3A	04/25/2023	3	NA	NA	NA	NA	NA	NA	<1.01
South Sidewall 4	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	297
South Sidewall 5	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	668
South Sidewall 5A	04/25/2023	3	NA	NA	NA	NA	NA	NA	<1.01
South Sidewall 6	03/23/2023	3	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	530
South Sidewall 7	03/23/2023	3	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	21.3

eTECH

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Chevron USA, Inc. - Benson Shugart Waterflood Unit #015
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Excavation Soil Samples - Incident Number nMLB0526441458									
South Sidewall 8	03/23/2023	3	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	18.1
South Sidewall 9	03/23/2023	3	<0.00104	<0.00104	<26.0	<26.0	<26.0	<26.0	268
South Sidewall 10	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	402
South Sidewall 11	03/23/2023	3	<0.00102	<0.00102	<25.5	<25.5	<25.5	<25.5	360
West Sidewall	03/23/2023	3	<0.00103	<0.00103	<25.8	<25.8	<25.8	<25.8	21.8

Notes:
bgs: below ground surface
mg/kg: milligrams per kilogram
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon
NMOCD: New Mexico Oil Conservation Division
NMAC: New Mexico Administrative Code
Concentrations in "grey" represent excavated soil samples
*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard for Soils Impacted by a Release*
NA: Not Analyzed

APPENDIX E

Laboratory Analytical Reports & Chain-of-Custody Documentation

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Blake Estep

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: Benson Shugart Waterflood Unit #015

Project Number: 15306

Location:

Lab Order Number: 3C24008

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 04/05/23

E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa TX, 79765

Project: Benson Shugart Waterflood Unit #015
Project Number: 15306
Project Manager: Blake Estep

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom Hole -1 @ 5'	3C24008-01	Soil	03/23/23 12:00	03-24-2023 11:45
Bottom Hole -2 @ 5'	3C24008-02	Soil	03/23/23 12:02	03-24-2023 11:45
Bottom Hole -3 @ 5'	3C24008-03	Soil	03/23/23 12:04	03-24-2023 11:45
Bottom Hole -4 @ 5'	3C24008-04	Soil	03/23/23 12:06	03-24-2023 11:45
Bottom Hole -5 @ 5'	3C24008-05	Soil	03/23/23 12:08	03-24-2023 11:45
Bottom Hole -6 @ 5'	3C24008-06	Soil	03/23/23 12:10	03-24-2023 11:45
Bottom Hole -7 @ 5'	3C24008-07	Soil	03/23/23 12:12	03-24-2023 11:45
Bottom Hole -8 @ 5'	3C24008-08	Soil	03/23/23 12:14	03-24-2023 11:45
Bottom Hole -9 @ 5'	3C24008-09	Soil	03/23/23 12:16	03-24-2023 11:45
Bottom Hole -10 @ 5'	3C24008-10	Soil	03/23/23 12:18	03-24-2023 11:45
Bottom Hole -11 @ 6'	3C24008-11	Soil	03/23/23 12:20	03-24-2023 11:45
Bottom Hole -12 @ 6'	3C24008-12	Soil	03/23/23 12:22	03-24-2023 11:45
Bottom Hole -13 @ 7'	3C24008-13	Soil	03/23/23 12:24	03-24-2023 11:45
Bottom Hole -14 @ 7'	3C24008-14	Soil	03/23/23 12:26	03-24-2023 11:45
Bottom Hole -15 @ 7'	3C24008-15	Soil	03/23/23 12:28	03-24-2023 11:45
Bottom Hole -16 @ 6'	3C24008-16	Soil	03/23/23 12:30	03-24-2023 11:45
Bottom Hole -17 @ 6'	3C24008-17	Soil	03/23/23 12:32	03-24-2023 11:45
Bottom Hole -18 @ 6'	3C24008-18	Soil	03/23/23 12:34	03-24-2023 11:45
Bottom Hole -19 @ 6'	3C24008-19	Soil	03/23/23 12:36	03-24-2023 11:45
Bottom Hole -20 @ 6'	3C24008-20	Soil	03/23/23 12:38	03-24-2023 11:45
Bottom Hole -21 @ 6'	3C24008-21	Soil	03/23/23 12:40	03-24-2023 11:45
Bottom Hole -22 @ 5'	3C24008-22	Soil	03/23/23 12:42	03-24-2023 11:45
Bottom Hole -23 @ 4'	3C24008-23	Soil	03/23/23 12:44	03-24-2023 11:45
Bottom Hole -24 @ 4'	3C24008-24	Soil	03/23/23 12:46	03-24-2023 11:45
Bottom Hole -25 @ 4'	3C24008-25	Soil	03/23/23 12:48	03-24-2023 11:45
Bottom Hole -26 @ 4'	3C24008-26	Soil	03/23/23 12:50	03-24-2023 11:45
Bottom Hole -27 @ 4'	3C24008-27	Soil	03/23/23 12:52	03-24-2023 11:45
North Sidewall -1 @ 3'	3C24008-28	Soil	03/23/23 12:54	03-24-2023 11:45
North Sidewall -2 @ 3'	3C24008-29	Soil	03/23/23 12:56	03-24-2023 11:45
North Sidewall -3 @ 3'	3C24008-30	Soil	03/23/23 12:58	03-24-2023 11:45
North Sidewall -4 @ 3'	3C24008-31	Soil	03/23/23 13:00	03-24-2023 11:45
North Sidewall -5 @ 3'	3C24008-32	Soil	03/23/23 13:02	03-24-2023 11:45
North Sidewall -6 @ 3'	3C24008-33	Soil	03/23/23 13:04	03-24-2023 11:45
North Sidewall -7 @ 3'	3C24008-34	Soil	03/23/23 13:06	03-24-2023 11:45

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
North Sidewall -8 @ 3'	3C24008-35	Soil	03/23/23 13:08	03-24-2023 11:45
Noth Sidewall -9 @ 3'	3C24008-36	Soil	03/23/23 13:10	03-24-2023 11:45
North Sidewall -10 @ 3'	3C24008-37	Soil	03/23/23 13:12	03-24-2023 11:45
North Sidewall -11 @ 3'	3C24008-38	Soil	03/23/23 13:14	03-24-2023 11:45
East Sidewall @ 3'	3C24008-39	Soil	03/23/23 13:16	03-24-2023 11:45
South Sidewall -1 @ 3'	3C24008-40	Soil	03/23/23 13:18	03-24-2023 11:45
South Sidewall -2 @ 3'	3C24008-41	Soil	03/23/23 13:20	03-24-2023 11:45
South Sidewall -3 @ 3'	3C24008-42	Soil	03/23/23 13:22	03-24-2023 11:45
South Sidewall -4 @ 3'	3C24008-43	Soil	03/23/23 13:24	03-24-2023 11:45
South Sidewall -5 @ 3'	3C24008-44	Soil	03/23/23 13:26	03-24-2023 11:45
South Sidewall -6 @ 3'	3C24008-45	Soil	03/23/23 13:28	03-24-2023 11:45
South Sidewall -7 @ 3'	3C24008-46	Soil	03/23/23 13:30	03-24-2023 11:45
South Sidewall -8 @ 3'	3C24008-47	Soil	03/23/23 13:32	03-24-2023 11:45
South Sidewall -9 @ 3'	3C24008-48	Soil	03/23/23 13:34	03-24-2023 11:45
South Sidewall -10 @ 3'	3C24008-49	Soil	03/23/23 13:36	03-24-2023 11:45
South Sidewall -11 @ 3'	3C24008-50	Soil	03/23/23 13:38	03-24-2023 11:45
West Sidewall @ 3'	3C24008-51	Soil	03/23/23 13:40	03-24-2023 11:45

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -1 @ 5'

3C24008-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:10	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:10	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:10	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:10	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:10	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*77.1 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 16:10*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*95.7 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 16:10*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 00:54	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 00:54	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 00:54	TPH 8015M	
Surrogate: 1-Chlorooctane		*98.6 %*	*70-130*		*P3C2804*	*03/28/23 13:30*	*03/29/23 00:54*	*TPH 8015M*	
Surrogate: o-Terphenyl		*119 %*	*70-130*		*P3C2804*	*03/28/23 13:30*	*03/29/23 00:54*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 13:30	03/29/23 00:54	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**423**	1.03	mg/kg dry	1	P3C2914	03/29/23 14:27	03/30/23 15:22	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -2 @ 5'

3C24008-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:31	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:31	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:31	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:31	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:31	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*97.0 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 16:31*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*78.7 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 16:31*	*EPA 8021B*	*S-GC*
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 01:15	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 01:15	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 01:15	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.5 %*	*70-130*		*P3C2804*	*03/28/23 13:30*	*03/29/23 01:15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*121 %*	*70-130*		*P3C2804*	*03/28/23 13:30*	*03/29/23 01:15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 13:30	03/29/23 01:15	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**253**	1.02	mg/kg dry	1	P3C2914	03/29/23 14:27	03/30/23 15:37	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -3 @ 5'

3C24008-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:52	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:52	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:52	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:52	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 16:52	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*78.9 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 16:52*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*97.0 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 16:52*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 01:37	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 01:37	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 01:37	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.4 %*	*70-130*		*P3C2804*	*03/28/23 13:30*	*03/29/23 01:37*	*TPH 8015M*	
Surrogate: o-Terphenyl		*120 %*	*70-130*		*P3C2804*	*03/28/23 13:30*	*03/29/23 01:37*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 13:30	03/29/23 01:37	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**527**	1.02	mg/kg dry	1	P3C2914	03/29/23 14:27	03/30/23 15:52	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -4 @ 5'

3C24008-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:12	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:12	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:12	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:12	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:12	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*76.8 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 17:12*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*95.2 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 17:12*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 01:59	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 01:59	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2804	03/28/23 13:30	03/29/23 01:59	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.4 %*	*70-130*		*P3C2804*	*03/28/23 13:30*	*03/29/23 01:59*	*TPH 8015M*	
Surrogate: o-Terphenyl		*121 %*	*70-130*		*P3C2804*	*03/28/23 13:30*	*03/29/23 01:59*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 13:30	03/29/23 01:59	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**932**	1.03	mg/kg dry	1	P3C2914	03/29/23 14:27	03/30/23 16:08	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -5 @ 5'

3C24008-05 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:33	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:33	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:33	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:33	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:33	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*76.8 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 17:33*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*93.4 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 17:33*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 13:33	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 13:33	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 13:33	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.2 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 13:33*	*TPH 8015M*	
Surrogate: o-Terphenyl		*97.1 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 13:33*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 13:33	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**441**	1.02	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 15:31	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -6 @ 5'

3C24008-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:53	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:53	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:53	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:53	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 17:53	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*93.9 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 17:53*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*82.3 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 17:53*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 13:58	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 13:58	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 13:58	TPH 8015M	
Surrogate: 1-Chlorooctane		*91.6 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 13:58*	*TPH 8015M*	
Surrogate: o-Terphenyl		*99.2 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 13:58*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 13:58	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**362**	1.02	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 16:32	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -7 @ 5'

3C24008-07 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:13	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:13	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:13	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:13	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*93.7 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 18:13*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*82.2 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 18:13*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 14:23	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 14:23	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 14:23	TPH 8015M	
Surrogate: 1-Chlorooctane		*86.4 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 14:23*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.3 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 14:23*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 14:23	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**146**	1.02	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 16:53	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -8 @ 5'

3C24008-08 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:33	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:33	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:33	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:33	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:33	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*93.8 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 18:33*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*84.6 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 18:33*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 14:47	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 14:47	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 14:47	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.8 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 14:47*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.8 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 14:47*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 14:47	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**55.5**	1.02	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 17:13	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -9 @ 5'

3C24008-09 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:54	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:54	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:54	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:54	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 18:54	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*90.9 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 18:54*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*76.9 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 18:54*	*EPA 8021B*	*S-GC*
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 15:12	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 15:12	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 15:12	TPH 8015M	
Surrogate: 1-Chlorooctane		*81.1 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 15:12*	*TPH 8015M*	
Surrogate: o-Terphenyl		*87.9 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 15:12*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 15:12	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**116**	1.03	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 17:34	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -10 @ 5'

3C24008-10 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 19:14	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 19:14	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 19:14	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 19:14	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 19:14	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*78.8 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 19:14*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*92.6 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 19:14*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 15:37	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 15:37	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 15:37	TPH 8015M	
Surrogate: 1-Chlorooctane		*86.0 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 15:37*	*TPH 8015M*	
Surrogate: o-Terphenyl		*92.6 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 15:37*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 15:37	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**104**	1.02	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 17:54	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -11 @ 6'

3C24008-11 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:16	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:16	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:16	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:16	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*87.8 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 20:16*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.7 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 20:16*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 16:02	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 16:02	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 16:02	TPH 8015M	
Surrogate: 1-Chlorooctane		*85.5 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 16:02*	*TPH 8015M*	
Surrogate: o-Terphenyl		*93.7 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 16:02*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 16:02	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**113**	1.02	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 18:15	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -12 @ 6'

3C24008-12 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:36	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:36	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:36	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:36	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:36	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*89.6 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 20:36*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.0 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 20:36*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 16:27	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 16:27	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 16:27	TPH 8015M	
Surrogate: 1-Chlorooctane		*76.2 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 16:27*	*TPH 8015M*	
Surrogate: o-Terphenyl		*82.7 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 16:27*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 16:27	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**424**	1.02	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 18:35	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -13 @ 7'

3C24008-13 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:57	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:57	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:57	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:57	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 20:57	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*91.6 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 20:57*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.7 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 20:57*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 16:53	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 16:53	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 16:53	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.8 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 16:53*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.8 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 16:53*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 16:53	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**1360**	1.03	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 18:56	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -14 @ 7'

3C24008-14 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:17	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:17	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:17	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:17	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:17	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*92.7 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 21:17*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*98.3 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 21:17*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 17:18	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 17:18	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 17:18	TPH 8015M	
Surrogate: 1-Chlorooctane		*89.7 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 17:18*	*TPH 8015M*	
Surrogate: o-Terphenyl		*97.5 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 17:18*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 17:18	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**173**	1.03	mg/kg dry	1	P3C2914	03/29/23 14:27	04/01/23 19:16	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -15 @ 7'

3C24008-15 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:38	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:38	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:38	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:38	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:38	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*94.6 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 21:38*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.3 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 21:38*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 18:32	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 18:32	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 18:32	TPH 8015M	
Surrogate: 1-Chlorooctane		*88.5 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 18:32*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.4 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 18:32*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 18:32	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**674**	1.03	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 17:30	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -16 @ 6'

3C24008-16 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:59	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:59	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:59	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:59	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 21:59	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*96.5 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 21:59*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.0 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 21:59*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 18:57	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 18:57	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 18:57	TPH 8015M	
Surrogate: 1-Chlorooctane		*86.3 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 18:57*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.2 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 18:57*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 18:57	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**1140**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 18:13	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -17 @ 6'

3C24008-17 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:19	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:19	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:19	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:19	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:19	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*96.9 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 22:19*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.9 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 22:19*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 19:22	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 19:22	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 19:22	TPH 8015M	
Surrogate: 1-Chlorooctane		*88.3 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 19:22*	*TPH 8015M*	
Surrogate: o-Terphenyl		*97.9 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 19:22*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 19:22	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**540**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 18:27	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -18 @ 6'

3C24008-18 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:40	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:40	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:40	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:40	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 22:40	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*91.2 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 22:40*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.6 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 22:40*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 19:46	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 19:46	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 19:46	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.0 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 19:46*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.8 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 19:46*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 19:46	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**514**	1.03	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 18:41	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -19 @ 6'

3C24008-19 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:00	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:00	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:00	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:00	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:00	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*93.2 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 23:00*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*97.2 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 23:00*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 20:10	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 20:10	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 20:10	TPH 8015M	
Surrogate: 1-Chlorooctane		*86.8 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 20:10*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.5 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 20:10*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 20:10	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**612**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 18:55	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -20 @ 6'

3C24008-20 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:21	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:21	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:21	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:21	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2702	03/27/23 12:48	03/28/23 23:21	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.7 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 23:21*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*96.6 %*	*80-120*		*P3C2702*	*03/27/23 12:48*	*03/28/23 23:21*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 20:35	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 20:35	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 20:35	TPH 8015M	
Surrogate: 1-Chlorooctane		*85.7 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 20:35*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.9 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 20:35*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 20:35	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**313**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 19:10	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -21 @ 6'

3C24008-21 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:11	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:11	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:11	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:11	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:11	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.5 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 02:11*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*98.5 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 02:11*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 20:59	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 20:59	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 20:59	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.2 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 20:59*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.0 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 20:59*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 20:59	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**396**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 19:24	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -22 @ 5'

3C24008-22 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:31	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:31	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:31	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:31	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:31	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.6 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 02:31*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*94.9 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 02:31*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 21:23	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 21:23	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 21:23	TPH 8015M	
Surrogate: 1-Chlorooctane		*91.4 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 21:23*	*TPH 8015M*	
Surrogate: o-Terphenyl		*100 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 21:23*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 21:23	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**337**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 19:38	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -23 @ 4'

3C24008-23 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:52	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:52	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:52	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:52	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 02:52	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.2 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 02:52*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*93.4 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 02:52*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 21:46	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 21:46	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 21:46	TPH 8015M	
Surrogate: 1-Chlorooctane		*84.6 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 21:46*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.0 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 21:46*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 21:46	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**163**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 19:52	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -24 @ 4'

3C24008-24 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:13	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:13	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:13	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:13	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.9 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 03:13*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*98.1 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 03:13*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 22:10	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 22:10	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2805	03/28/23 14:30	03/29/23 22:10	TPH 8015M	
Surrogate: 1-Chlorooctane		*88.4 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 22:10*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.4 %*	*70-130*		*P3C2805*	*03/28/23 14:30*	*03/29/23 22:10*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 14:30	03/29/23 22:10	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**153**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 20:07	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -25 @ 4'

3C24008-25 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:34	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:34	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:34	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:34	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:34	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*98.3 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 03:34*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.1 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 03:34*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 13:15	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 13:15	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 13:15	TPH 8015M	
Surrogate: 1-Chlorooctane		*101 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 13:15*	*TPH 8015M*	
Surrogate: o-Terphenyl		*122 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 13:15*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 13:15	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**81.6**	1.02	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 20:49	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -26 @ 4'

3C24008-26 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:55	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:55	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:55	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:55	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 03:55	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.1 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 03:55*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*97.9 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 03:55*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 13:37	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 13:37	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 13:37	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.1 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 13:37*	*TPH 8015M*	
Surrogate: o-Terphenyl		*117 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 13:37*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 13:37	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**454**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 21:32	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -27 @ 4'

3C24008-27 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:16	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:16	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:16	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:16	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.2 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 04:16*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*97.8 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 04:16*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 13:59	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 13:59	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 13:59	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.2 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 13:59*	*TPH 8015M*	
Surrogate: o-Terphenyl		*118 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 13:59*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 13:59	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**296**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 21:47	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -1 @ 3'

3C24008-28 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:37	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:37	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:37	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:37	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:37	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*98.5 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 04:37*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.2 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 04:37*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 14:21	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 14:21	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 14:21	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.3 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 14:21*	*TPH 8015M*	
Surrogate: o-Terphenyl		*118 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 14:21*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 14:21	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**476**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 22:01	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -2 @ 3'

3C24008-29 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:59	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:59	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:59	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:59	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 04:59	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.5 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 04:59*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*98.3 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 04:59*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 14:43	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 14:43	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 14:43	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.1 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 14:43*	*TPH 8015M*	
Surrogate: o-Terphenyl		*123 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 14:43*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 14:43	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**78.0**	1.05	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 22:15	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -3 @ 3'

3C24008-30 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 05:20	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 05:20	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 05:20	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 05:20	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 05:20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.6 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 05:20*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*96.6 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 05:20*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 15:05	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 15:05	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 15:05	TPH 8015M	
Surrogate: 1-Chlorooctane		*95.6 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 15:05*	*TPH 8015M*	
Surrogate: o-Terphenyl		*118 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 15:05*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 15:05	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**93.2**	1.03	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 22:30	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -4 @ 3'

3C24008-31 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:22	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:22	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:22	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:22	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:22	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 06:22*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.3 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 06:22*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 15:27	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 15:27	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 15:27	TPH 8015M	
Surrogate: 1-Chlorooctane		*95.3 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 15:27*	*TPH 8015M*	
Surrogate: o-Terphenyl		*117 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 15:27*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 15:27	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**19.3**	1.03	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 22:44	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -5 @ 3'

3C24008-32 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:43	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:43	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:43	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:43	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 06:43	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*95.4 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 06:43*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.8 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 06:43*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 15:49	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 15:49	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 15:49	TPH 8015M	
Surrogate: 1-Chlorooctane		*95.7 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 15:49*	*TPH 8015M*	
Surrogate: o-Terphenyl		*119 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 15:49*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 15:49	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**104**	1.03	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 22:58	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -6 @ 3'

3C24008-33 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:04	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:04	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:04	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:04	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:04	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.9 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 07:04*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 07:04*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 16:11	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 16:11	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 16:11	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.2 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 16:11*	*TPH 8015M*	
Surrogate: o-Terphenyl		*118 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 16:11*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 16:11	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**93.1**	1.04	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 23:13	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -7 @ 3'

3C24008-34 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:25	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:25	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:25	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:25	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:25	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.7 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 07:25*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*97.8 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 07:25*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 16:33	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 16:33	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 16:33	TPH 8015M	
Surrogate: 1-Chlorooctane		*98.3 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 16:33*	*TPH 8015M*	
Surrogate: o-Terphenyl		*121 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 16:33*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 16:33	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**99.0**	1.03	mg/kg dry	1	P3C2915	03/29/23 14:29	04/01/23 23:27	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -8 @ 3'

3C24008-35 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:46	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:46	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:46	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:46	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 07:46	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*99.6 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 07:46*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.8 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 07:46*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 17:40	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 17:40	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 17:40	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.6 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 17:40*	*TPH 8015M*	
Surrogate: o-Terphenyl		*122 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 17:40*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 17:40	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**13.8**	1.04	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 12:28	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Noth Sidewall -9 @ 3'

3C24008-36 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:08	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:08	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:08	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:08	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:08	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*98.6 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 08:08*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.3 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 08:08*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 18:02	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 18:02	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 18:02	TPH 8015M	
Surrogate: 1-Chlorooctane		*92.0 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 18:02*	*TPH 8015M*	
Surrogate: o-Terphenyl		*116 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 18:02*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 18:02	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**151**	1.05	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 13:30	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -10 @ 3'

3C24008-37 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:28	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:28	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:28	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:28	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:28	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*94.5 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 08:28*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.2 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 08:28*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 18:24	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 18:24	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 18:24	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.5 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 18:24*	*TPH 8015M*	
Surrogate: o-Terphenyl		*118 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 18:24*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 18:24	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**212**	1.03	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 13:50	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

North Sidewall -11 @ 3'

3C24008-38 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:49	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:49	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:49	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:49	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 08:49	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.7 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 08:49*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*95.0 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 08:49*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 18:46	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 18:46	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 18:46	TPH 8015M	
Surrogate: 1-Chlorooctane		*95.7 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 18:46*	*TPH 8015M*	
Surrogate: o-Terphenyl		*120 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 18:46*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 18:46	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**390**	1.03	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 14:11	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

East Sidewall @ 3'

3C24008-39 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:10	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:10	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:10	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:10	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:10	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*93.7 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 09:10*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*88.4 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 09:10*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 19:08	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 19:08	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 19:08	TPH 8015M	
Surrogate: 1-Chlorooctane		*98.0 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 19:08*	*TPH 8015M*	
Surrogate: o-Terphenyl		*120 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 19:08*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 19:08	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**585**	1.05	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 14:31	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -1 @ 3'

3C24008-40 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:31	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:31	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:31	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:31	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2703	03/27/23 12:53	03/29/23 09:31	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.7 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 09:31*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*95.2 %*	*80-120*		*P3C2703*	*03/27/23 12:53*	*03/29/23 09:31*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 19:30	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 19:30	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 19:30	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.2 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 19:30*	*TPH 8015M*	
Surrogate: o-Terphenyl		*120 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 19:30*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 19:30	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**131**	1.03	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 14:52	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -2 @ 3'

3C24008-41 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:10	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:10	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:10	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:10	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:10	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*94.6 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 13:10*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*85.4 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 13:10*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 19:52	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 19:52	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 19:52	TPH 8015M	
Surrogate: 1-Chlorooctane		*98.3 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 19:52*	*TPH 8015M*	
Surrogate: o-Terphenyl		*120 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 19:52*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 19:52	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**774**	1.04	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 15:12	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -3 @ 3'

3C24008-42 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:30	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:30	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:30	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:30	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:30	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.9 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 13:30*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*90.0 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 13:30*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 20:13	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 20:13	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 20:13	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.6 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 20:13*	*TPH 8015M*	
Surrogate: o-Terphenyl		*123 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 20:13*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 20:13	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**740**	1.04	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 15:33	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -4 @ 3'

3C24008-43 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:51	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:51	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:51	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:51	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 13:51	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.9 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 13:51*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*87.6 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 13:51*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 20:35	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 20:35	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 20:35	TPH 8015M	
Surrogate: 1-Chlorooctane		*99.9 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 20:35*	*TPH 8015M*	
Surrogate: o-Terphenyl		*124 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 20:35*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 20:35	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**297**	1.03	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 15:53	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -5 @ 3'

3C24008-44 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:11	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:11	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:11	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:11	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:11	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*89.3 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 14:11*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.6 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 14:11*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 20:57	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 20:57	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2806	03/28/23 15:00	03/29/23 20:57	TPH 8015M	
Surrogate: 1-Chlorooctane		*96.1 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 20:57*	*TPH 8015M*	
Surrogate: o-Terphenyl		*121 %*	*70-130*		*P3C2806*	*03/28/23 15:00*	*03/29/23 20:57*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/28/23 15:00	03/29/23 20:57	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**668**	1.03	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 16:14	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -6 @ 3'

3C24008-45 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:32	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:32	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:32	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:32	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:32	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*90.5 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 14:32*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*96.5 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 14:32*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 01:48	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 01:48	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 01:48	TPH 8015M	
Surrogate: 1-Chlorooctane		*89.3 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 01:48*	*TPH 8015M*	
Surrogate: o-Terphenyl		*101 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 01:48*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/29/23 09:30	03/30/23 01:48	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**530**	1.04	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 17:16	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -7 @ 3'

3C24008-46 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:52	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:52	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:52	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:52	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 14:52	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.4 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 14:52*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*89.0 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 14:52*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 02:13	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 02:13	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 02:13	TPH 8015M	
Surrogate: 1-Chlorooctane		*84.1 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 02:13*	*TPH 8015M*	
Surrogate: o-Terphenyl		*95.7 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 02:13*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/29/23 09:30	03/30/23 02:13	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**21.3**	1.04	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 18:17	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -8 @ 3'

3C24008-47 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:13	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:13	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:13	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:13	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*96.3 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 15:13*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*92.4 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 15:13*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 02:38	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 02:38	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 02:38	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.4 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 02:38*	*TPH 8015M*	
Surrogate: o-Terphenyl		*96.2 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 02:38*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/29/23 09:30	03/30/23 02:38	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**18.1**	1.04	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 18:38	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -9 @ 3'

3C24008-48 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:34	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:34	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:34	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:34	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:34	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		*95.8 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 15:34*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene		*86.9 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 15:34*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 03:03	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 03:03	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 03:03	TPH 8015M	
Surrogate: 1-Chlorooctane		*89.0 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 03:03*	*TPH 8015M*	
Surrogate: o-Terphenyl		*98.5 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 03:03*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/29/23 09:30	03/30/23 03:03	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**268**	1.04	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 18:58	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -10 @ 3'

3C24008-49 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:54	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:54	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:54	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:54	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 15:54	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*85.5 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 15:54*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*95.9 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 15:54*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 03:28	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 03:28	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 03:28	TPH 8015M	
Surrogate: 1-Chlorooctane		*88.7 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 03:28*	*TPH 8015M*	
Surrogate: o-Terphenyl		*97.9 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 03:28*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/29/23 09:30	03/30/23 03:28	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**402**	1.03	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 19:19	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -11 @ 3'

3C24008-50 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 16:15	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 16:15	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 16:15	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 16:15	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 16:15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*87.1 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 16:15*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*94.9 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 16:15*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.5	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 03:52	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 03:52	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 03:52	TPH 8015M	
Surrogate: 1-Chlorooctane		*87.4 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 03:52*	*TPH 8015M*	
Surrogate: o-Terphenyl		*97.0 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 03:52*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	03/29/23 09:30	03/30/23 03:52	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**360**	1.02	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 19:39	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P3C2803	03/28/23 11:57	03/28/23 12:04	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

West Sidewall @ 3'

3C24008-51 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 17:17	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 17:17	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 17:17	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 17:17	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P3C2902	03/29/23 09:11	03/29/23 17:17	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*86.6 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 17:17*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*93.9 %*	*80-120*		*P3C2902*	*03/29/23 09:11*	*03/29/23 17:17*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 04:17	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 04:17	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P3C2908	03/29/23 09:30	03/30/23 04:17	TPH 8015M	
Surrogate: 1-Chlorooctane		*89.0 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 04:17*	*TPH 8015M*	
Surrogate: o-Terphenyl		*99.8 %*	*70-130*		*P3C2908*	*03/29/23 09:30*	*03/30/23 04:17*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/29/23 09:30	03/30/23 04:17	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**21.8**	1.03	mg/kg dry	1	P3C3006	03/30/23 13:44	04/02/23 20:00	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P3C2801	03/28/23 10:42	03/28/23 10:44	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2702 - * DEFAULT PREP *** **										
Blank (P3C2702-BLK1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Benzene	ND	0.00100	mg/kg							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	*0.0845*		*"*	*0.120*		*70.4*	*80-120*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.107*		*"*	*0.120*		*89.5*	*80-120*			
LCS (P3C2702-BS1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Benzene	0.0916	0.00100	mg/kg	0.100		91.6	80-120			
Toluene	0.0925	0.00100	"	0.100		92.5	80-120			
Ethylbenzene	0.0946	0.00100	"	0.100		94.6	80-120			
Xylene (p/m)	0.169	0.00200	"	0.200		84.5	80-120			
Xylene (o)	0.0915	0.00100	"	0.100		91.5	80-120			
Surrogate: 4-Bromofluorobenzene	*0.107*		*"*	*0.120*		*89.0*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.4*	*80-120*			
LCS Dup (P3C2702-BSD1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Benzene	0.0932	0.00100	mg/kg	0.100		93.2	80-120	1.66	20	
Toluene	0.0916	0.00100	"	0.100		91.6	80-120	0.902	20	
Ethylbenzene	0.0926	0.00100	"	0.100		92.6	80-120	2.18	20	
Xylene (p/m)	0.165	0.00200	"	0.200		82.6	80-120	2.30	20	
Xylene (o)	0.0907	0.00100	"	0.100		90.7	80-120	0.922	20	
Surrogate: 4-Bromofluorobenzene	*0.101*		*"*	*0.120*		*83.9*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.117*		*"*	*0.120*		*97.1*	*80-120*			
Calibration Blank (P3C2702-CCB1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Benzene	0.00		ug/kg							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.109*		*"*	*0.120*		*91.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0898*		*"*	*0.120*		*74.8*	*80-120*			*S-GC*

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2702 - * DEFAULT PREP *** **										
Calibration Blank (P3C2702-CCB2)				Prepared: 03/27/23 Analyzed: 03/28/23						
Benzene	0.00		ug/kg							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.113*		"	*0.120*		*94.3*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0995*		"	*0.120*		*82.9*	*80-120*			
Calibration Blank (P3C2702-CCB3)				Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.00		ug/kg							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.112*		"	*0.120*		*93.2*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.113*		"	*0.120*		*94.0*	*80-120*			
Calibration Check (P3C2702-CCV1)				Prepared: 03/27/23 Analyzed: 03/28/23						
Benzene	0.101	0.00100	mg/kg	0.100		101	80-120			
Toluene	0.0961	0.00100	"	0.100		96.1	80-120			
Ethylbenzene	0.0934	0.00100	"	0.100		93.4	80-120			
Xylene (p/m)	0.176	0.00200	"	0.200		87.9	80-120			
Xylene (o)	0.0984	0.00100	"	0.100		98.4	80-120			
Surrogate: 4-Bromofluorobenzene	*0.0950*		"	*0.120*		*79.2*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*94.8*	*75-125*			
Calibration Check (P3C2702-CCV2)				Prepared: 03/27/23 Analyzed: 03/28/23						
Benzene	0.110	0.00100	mg/kg	0.100		110	80-120			
Toluene	0.0915	0.00100	"	0.100		91.5	80-120			
Ethylbenzene	0.0842	0.00100	"	0.100		84.2	80-120			
Xylene (p/m)	0.161	0.00200	"	0.200		80.5	80-120			
Xylene (o)	0.0882	0.00100	"	0.100		88.2	80-120			
Surrogate: 4-Bromofluorobenzene	*0.103*		"	*0.120*		*85.8*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.120*		*97.9*	*75-125*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2702 - * DEFAULT PREP *** **										
Calibration Check (P3C2702-CCV3)				Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.102	0.00100	mg/kg	0.100		102	80-120			
Toluene	0.0937	0.00100	"	0.100		93.7	80-120			
Ethylbenzene	0.0889	0.00100	"	0.100		88.9	80-120			
Xylene (p/m)	0.161	0.00200	"	0.200		80.4	80-120			
Xylene (o)	0.0878	0.00100	"	0.100		87.8	80-120			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.121*		*"*	*0.120*		*101*	*75-125*			
Matrix Spike (P3C2702-MS1)		**Source: 3C24008-01**		Prepared: 03/27/23 Analyzed: 03/28/23						
Benzene	0.0801	0.00103	mg/kg dry	0.103	ND	77.6	80-120			QM-05
Toluene	0.0798	0.00103	"	0.103	ND	77.4	80-120			QM-05
Ethylbenzene	0.0798	0.00103	"	0.103	ND	77.4	80-120			QM-05
Xylene (p/m)	0.137	0.00206	"	0.206	ND	66.6	80-120			QM-05
Xylene (o)	0.0724	0.00103	"	0.103	ND	70.2	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	*0.127*		*"*	*0.124*		*103*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.121*		*"*	*0.124*		*98.2*	*80-120*			
Matrix Spike Dup (P3C2702-MSD1)		**Source: 3C24008-01**		Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.0814	0.00103	mg/kg dry	0.103	ND	78.9	80-120	1.63	20	QM-05
Toluene	0.0823	0.00103	"	0.103	ND	79.8	80-120	3.04	20	QM-05
Ethylbenzene	0.0845	0.00103	"	0.103	ND	82.0	80-120	5.73	20	
Xylene (p/m)	0.146	0.00206	"	0.206	ND	70.9	80-120	6.19	20	QM-05
Xylene (o)	0.0777	0.00103	"	0.103	ND	75.4	80-120	7.11	20	QM-05
Surrogate: 1,4-Difluorobenzene	*0.121*		*"*	*0.124*		*98.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.127*		*"*	*0.124*		*103*	*80-120*			
Batch P3C2703 - * DEFAULT PREP *** **										
LCS (P3C2703-BS1)				Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.103	0.00100	mg/kg	0.100		103	80-120			
Toluene	0.0955	0.00100	"	0.100		95.5	80-120			
Ethylbenzene	0.0968	0.00100	"	0.100		96.8	80-120			
Xylene (p/m)	0.166	0.00200	"	0.200		83.1	80-120			
Xylene (o)	0.0895	0.00100	"	0.100		89.5	80-120			
Surrogate: 4-Bromofluorobenzene	*0.121*		*"*	*0.120*		*101*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.4*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2703 - * DEFAULT PREP *** **										
LCS Dup (P3C2703-BSD1)				Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.109	0.00100	mg/kg	0.100		109	80-120	5.33	20	
Toluene	0.101	0.00100	"	0.100		101	80-120	5.97	20	
Ethylbenzene	0.103	0.00100	"	0.100		103	80-120	6.18	20	
Xylene (p/m)	0.176	0.00200	"	0.200		88.0	80-120	5.81	20	
Xylene (o)	0.0950	0.00100	"	0.100		95.0	80-120	6.00	20	
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.121*		*"*	*0.120*		*101*	*80-120*			
Calibration Blank (P3C2703-CCB1)				Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.00		ug/kg							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.113*		*"*	*0.120*		*94.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.112*		*"*	*0.120*		*93.2*	*80-120*			
Calibration Blank (P3C2703-CCB2)				Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.00		ug/kg							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.112*		*"*	*0.120*		*93.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.107*		*"*	*0.120*		*89.3*	*80-120*			
Calibration Check (P3C2703-CCV1)				Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.102	0.00100	mg/kg	0.100		102	80-120			
Toluene	0.0937	0.00100	"	0.100		93.7	80-120			
Ethylbenzene	0.0889	0.00100	"	0.100		88.9	80-120			
Xylene (p/m)	0.161	0.00200	"	0.200		80.4	80-120			
Xylene (o)	0.0878	0.00100	"	0.100		87.8	80-120			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.121*		*"*	*0.120*		*101*	*75-125*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2703 - * DEFAULT PREP *** **										
Calibration Check (P3C2703-CCV2)				Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.105	0.00100	mg/kg	0.100		105	80-120			
Toluene	0.0938	0.00100	"	0.100		93.8	80-120			
Ethylbenzene	0.0886	0.00100	"	0.100		88.6	80-120			
Xylene (p/m)	0.161	0.00200	"	0.200		80.7	80-120			
Xylene (o)	0.0885	0.00100	"	0.100		88.5	80-120			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.7*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.118*		*"*	*0.120*		*98.1*	*75-125*			
Calibration Check (P3C2703-CCV3)				Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.107	0.00100	mg/kg	0.100		107	80-120			
Toluene	0.0962	0.00100	"	0.100		96.2	80-120			
Ethylbenzene	0.0894	0.00100	"	0.100		89.4	80-120			
Xylene (p/m)	0.163	0.00200	"	0.200		81.3	80-120			
Xylene (o)	0.0905	0.00100	"	0.100		90.5	80-120			
Surrogate: 4-Bromofluorobenzene	*0.117*		*"*	*0.120*		*97.9*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.115*		*"*	*0.120*		*95.6*	*75-125*			
Matrix Spike (P3C2703-MS1)		**Source: 3C24008-21**		Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.0861	0.00104	mg/kg dry	0.104	ND	82.7	80-120			
Toluene	0.0747	0.00104	"	0.104	ND	71.7	80-120			QM-05
Ethylbenzene	0.0749	0.00104	"	0.104	ND	71.9	80-120			QM-05
Xylene (p/m)	0.130	0.00208	"	0.208	ND	62.6	80-120			QM-05
Xylene (o)	0.0742	0.00104	"	0.104	ND	71.3	80-120			QM-05
Surrogate: 1,4-Difluorobenzene	*0.120*		*"*	*0.125*		*95.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.113*		*"*	*0.125*		*90.6*	*80-120*			
Matrix Spike Dup (P3C2703-MSD1)		**Source: 3C24008-21**		Prepared: 03/27/23 Analyzed: 03/29/23						
Benzene	0.0775	0.00104	mg/kg dry	0.104	ND	74.4	80-120	10.6	20	QM-05
Toluene	0.0733	0.00104	"	0.104	ND	70.3	80-120	1.91	20	QM-05
Ethylbenzene	0.0751	0.00104	"	0.104	ND	72.1	80-120	0.347	20	QM-05
Xylene (p/m)	0.130	0.00208	"	0.208	ND	62.4	80-120	0.304	20	QM-05
Xylene (o)	0.0709	0.00104	"	0.104	ND	68.0	80-120	4.64	20	QM-05
Surrogate: 1,4-Difluorobenzene	*0.121*		*"*	*0.125*		*96.9*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.128*		*"*	*0.125*		*102*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2902 - * DEFAULT PREP *** **										
Blank (P3C2902-BLK1)				Prepared & Analyzed: 03/29/23						
Benzene	ND	0.00100	mg/kg							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	*0.110*		"	*0.120*		*91.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0984*		"	*0.120*		*82.0*	*80-120*			
LCS (P3C2902-BS1)				Prepared & Analyzed: 03/29/23						
Benzene	0.114	0.00100	mg/kg	0.100		114	80-120			
Toluene	0.105	0.00100	"	0.100		105	80-120			
Ethylbenzene	0.107	0.00100	"	0.100		107	80-120			
Xylene (p/m)	0.190	0.00200	"	0.200		95.1	80-120			
Xylene (o)	0.101	0.00100	"	0.100		101	80-120			
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*96.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.119*		"	*0.120*		*99.1*	*80-120*			
LCS Dup (P3C2902-BSD1)				Prepared & Analyzed: 03/29/23						
Benzene	0.118	0.00100	mg/kg	0.100		118	80-120	3.22	20	
Toluene	0.102	0.00100	"	0.100		102	80-120	2.43	20	
Ethylbenzene	0.101	0.00100	"	0.100		101	80-120	5.96	20	
Xylene (p/m)	0.180	0.00200	"	0.200		90.2	80-120	5.34	20	
Xylene (o)	0.0975	0.00100	"	0.100		97.5	80-120	3.47	20	
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*95.9*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.105*		"	*0.120*		*87.4*	*80-120*			
Calibration Blank (P3C2902-CCB1)				Prepared & Analyzed: 03/29/23						
Benzene	0.00		ug/kg							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.112*		"	*0.120*		*93.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.102*		"	*0.120*		*85.2*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2902 - * DEFAULT PREP *** **										
Calibration Blank (P3C2902-CCB2)				Prepared & Analyzed: 03/29/23						
Benzene	0.00		ug/kg							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.111*		"	*0.120*		*92.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.102*		"	*0.120*		*85.3*	*80-120*			
Calibration Check (P3C2902-CCV1)				Prepared & Analyzed: 03/29/23						
Benzene	0.114	0.00100	mg/kg	0.100		114	80-120			
Toluene	0.103	0.00100	"	0.100		103	80-120			
Ethylbenzene	0.0983	0.00100	"	0.100		98.3	80-120			
Xylene (p/m)	0.185	0.00200	"	0.200		92.4	80-120			
Xylene (o)	0.0993	0.00100	"	0.100		99.3	80-120			
Surrogate: 1,4-Difluorobenzene	*0.115*		"	*0.120*		*95.6*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.114*		"	*0.120*		*94.8*	*75-125*			
Calibration Check (P3C2902-CCV2)				Prepared & Analyzed: 03/29/23						
Benzene	0.116	0.00100	mg/kg	0.100		116	80-120			
Toluene	0.0974	0.00100	"	0.100		97.4	80-120			
Ethylbenzene	0.0904	0.00100	"	0.100		90.4	80-120			
Xylene (p/m)	0.169	0.00200	"	0.200		84.7	80-120			
Xylene (o)	0.0944	0.00100	"	0.100		94.4	80-120			
Surrogate: 4-Bromofluorobenzene	*0.106*		"	*0.120*		*88.3*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.120*		*95.2*	*75-125*			
Calibration Check (P3C2902-CCV3)				Prepared & Analyzed: 03/29/23						
Benzene	0.111	0.00100	mg/kg	0.100		111	80-120			
Toluene	0.0942	0.00100	"	0.100		94.2	80-120			
Ethylbenzene	0.0869	0.00100	"	0.100		86.9	80-120			
Xylene (p/m)	0.162	0.00200	"	0.200		81.0	80-120			
Xylene (o)	0.0905	0.00100	"	0.100		90.5	80-120			
Surrogate: 4-Bromofluorobenzene	*0.102*		"	*0.120*		*85.4*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.113*		"	*0.120*		*94.0*	*75-125*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
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BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2902 - * DEFAULT PREP *** **										
Matrix Spike (P3C2902-MS1)	**Source: 3C24008-41**			Prepared & Analyzed: 03/29/23						
Benzene	0.0670	0.00104	mg/kg dry	0.104	ND	64.3	80-120			QM-05
Toluene	0.0601	0.00104	"	0.104	ND	57.7	80-120			QM-05
Ethylbenzene	0.0581	0.00104	"	0.104	ND	55.8	80-120			QM-05
Xylene (p/m)	0.103	0.00208	"	0.208	ND	49.6	80-120			QM-05
Xylene (o)	0.0570	0.00104	"	0.104	ND	54.7	80-120			QM-05
Surrogate: 1,4-Difluorobenzene	*0.118*		"	*0.125*		*94.7*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.105*		"	*0.125*		*84.3*	*80-120*			
Matrix Spike Dup (P3C2902-MSD1)	**Source: 3C24008-41**			Prepared & Analyzed: 03/29/23						
Benzene	0.0756	0.00104	mg/kg dry	0.104	ND	72.6	80-120	12.1	20	QM-05
Toluene	0.0696	0.00104	"	0.104	ND	66.9	80-120	14.7	20	QM-05
Ethylbenzene	0.0678	0.00104	"	0.104	ND	65.1	80-120	15.4	20	QM-05
Xylene (p/m)	0.120	0.00208	"	0.208	ND	57.6	80-120	15.1	20	QM-05
Xylene (o)	0.0666	0.00104	"	0.104	ND	64.0	80-120	15.6	20	QM-05
Surrogate: 1,4-Difluorobenzene	*0.120*		"	*0.125*		*95.7*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.109*		"	*0.125*		*87.1*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2804 - TX 1005										
Blank (P3C2804-BLK1)				Prepared & Analyzed: 03/28/23						
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*98.7*		*"*	*100*		*98.7*	*70-130*			
Surrogate: o-Terphenyl	*59.6*		*"*	*50.0*		*119*	*70-130*			
LCS (P3C2804-BS1)				Prepared & Analyzed: 03/28/23						
C6-C12	822	25.0	mg/kg	1000		82.2	75-125			
>C12-C28	1060	25.0	"	1000		106	75-125			
Surrogate: 1-Chlorooctane	*104*		*"*	*100*		*104*	*70-130*			
Surrogate: o-Terphenyl	*59.9*		*"*	*50.0*		*120*	*70-130*			
LCS Dup (P3C2804-BSD1)				Prepared & Analyzed: 03/28/23						
C6-C12	790	25.0	mg/kg	1000		79.0	75-125	3.97	20	
>C12-C28	1060	25.0	"	1000		106	75-125	0.708	20	
Surrogate: 1-Chlorooctane	*129*		*"*	*100*		*129*	*70-130*			
Surrogate: o-Terphenyl	*57.1*		*"*	*50.0*		*114*	*70-130*			
Calibration Check (P3C2804-CCV1)				Prepared & Analyzed: 03/28/23						
C6-C12	478	25.0	mg/kg	500		95.6	85-115			
>C12-C28	548	25.0	"	500		110	85-115			
Surrogate: 1-Chlorooctane	*123*		*"*	*100*		*123*	*70-130*			
Surrogate: o-Terphenyl	*60.6*		*"*	*50.0*		*121*	*70-130*			
Calibration Check (P3C2804-CCV2)				Prepared & Analyzed: 03/28/23						
C6-C12	478	25.0	mg/kg	500		95.5	85-115			
>C12-C28	504	25.0	"	500		101	85-115			
Surrogate: 1-Chlorooctane	*124*		*"*	*100*		*124*	*70-130*			
Surrogate: o-Terphenyl	*63.2*		*"*	*50.0*		*126*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2804 - TX 1005										
Calibration Check (P3C2804-CCV3)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	480	25.0	mg/kg	500		96.0	85-115			
>C12-C28	553	25.0	"	500		111	85-115			
Surrogate: 1-Chlorooctane	*124*		*"*	*100*		*124*	*70-130*			
Surrogate: o-Terphenyl	*62.3*		*"*	*50.0*		*125*	*70-130*			
Duplicate (P3C2804-DUP1)	**Source: 3C22016-01**			Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	4190	266	mg/kg dry		4200			0.304	20	R3
>C12-C28	40400	266	"		40300			0.312	20	R3
Surrogate: 1-Chlorooctane	*115*		*"*	*106*		*108*	*70-130*			
Surrogate: o-Terphenyl	*63.7*		*"*	*53.2*		*120*	*70-130*			
Batch P3C2805 - TX 1005										
Blank (P3C2805-BLK1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*91.7*		*"*	*100*		*91.7*	*70-130*			
Surrogate: o-Terphenyl	*50.6*		*"*	*50.0*		*101*	*70-130*			
LCS (P3C2805-BS1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	807	25.0	mg/kg	1000		80.7	75-125			
>C12-C28	1030	25.0	"	1000		103	75-125			
Surrogate: 1-Chlorooctane	*120*		*"*	*100*		*120*	*70-130*			
Surrogate: o-Terphenyl	*59.0*		*"*	*50.0*		*118*	*70-130*			
LCS Dup (P3C2805-BSD1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	774	25.0	mg/kg	1000		77.4	75-125	4.09	20	
>C12-C28	1010	25.0	"	1000		101	75-125	1.58	20	
Surrogate: 1-Chlorooctane	*117*		*"*	*100*		*117*	*70-130*			
Surrogate: o-Terphenyl	*58.9*		*"*	*50.0*		*118*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2805 - TX 1005										
Calibration Blank (P3C2805-CCB1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	5.35		mg/kg							
>C12-C28	11.6		"							
Surrogate: 1-Chlorooctane	*93.3*		*"*	*100*		*93.3*	*70-130*			
Surrogate: o-Terphenyl	*51.2*		*"*	*50.0*		*102*	*70-130*			
Calibration Blank (P3C2805-CCB2)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	6.25		mg/kg							
>C12-C28	10.4		"							
Surrogate: 1-Chlorooctane	*94.9*		*"*	*100*		*94.9*	*70-130*			
Surrogate: o-Terphenyl	*51.4*		*"*	*50.0*		*103*	*70-130*			
Calibration Check (P3C2805-CCV1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	473	25.0	mg/kg	500		94.6	85-115			
>C12-C28	485	25.0	"	500		97.0	85-115			
Surrogate: 1-Chlorooctane	*111*		*"*	*100*		*111*	*70-130*			
Surrogate: o-Terphenyl	*51.1*		*"*	*50.0*		*102*	*70-130*			
Calibration Check (P3C2805-CCV2)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	480	25.0	mg/kg	500		96.0	85-115			
>C12-C28	509	25.0	"	500		102	85-115			
Surrogate: 1-Chlorooctane	*113*		*"*	*100*		*113*	*70-130*			
Surrogate: o-Terphenyl	*52.6*		*"*	*50.0*		*105*	*70-130*			
Calibration Check (P3C2805-CCV3)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	488	25.0	mg/kg	500		97.7	85-115			
>C12-C28	514	25.0	"	500		103	85-115			
Surrogate: 1-Chlorooctane	*116*		*"*	*100*		*116*	*70-130*			
Surrogate: o-Terphenyl	*56.8*		*"*	*50.0*		*114*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2805 - TX 1005										
Matrix Spike (P3C2805-MS1)	**Source: 3C24008-24**			Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	776	26.0	mg/kg dry	1040	ND	74.5	75-125			QM-05
>C12-C28	980	26.0	"	1040	ND	94.1	75-125			
Surrogate: 1-Chlorooctane	*103*		*"*	*104*		*98.6*	*70-130*			
Surrogate: o-Terphenyl	*49.8*		*"*	*52.1*		*95.5*	*70-130*			
Matrix Spike Dup (P3C2805-MSD1)	**Source: 3C24008-24**			Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	727	26.0	mg/kg dry	1040	ND	69.8	75-125	6.59	20	QM-05
>C12-C28	980	26.0	"	1040	ND	94.1	75-125	0.00212	20	
Surrogate: 1-Chlorooctane	*103*		*"*	*104*		*98.7*	*70-130*			
Surrogate: o-Terphenyl	*51.5*		*"*	*52.1*		*98.9*	*70-130*			
Batch P3C2806 - TX 1005										
Blank (P3C2806-BLK1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*104*		*"*	*100*		*104*	*70-130*			
Surrogate: o-Terphenyl	*62.8*		*"*	*50.0*		*126*	*70-130*			
LCS (P3C2806-BS1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	801	25.0	mg/kg	1000		80.1	75-125			
>C12-C28	1020	25.0	"	1000		102	75-125			
Surrogate: 1-Chlorooctane	*112*		*"*	*100*		*112*	*70-130*			
Surrogate: o-Terphenyl	*61.1*		*"*	*50.0*		*122*	*70-130*			
LCS Dup (P3C2806-BSD1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	837	25.0	mg/kg	1000		83.7	75-125	4.41	20	
>C12-C28	1060	25.0	"	1000		106	75-125	3.42	20	
Surrogate: 1-Chlorooctane	*112*		*"*	*100*		*112*	*70-130*			
Surrogate: o-Terphenyl	*63.4*		*"*	*50.0*		*127*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
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Odessa TX, 79765	Project Manager: Blake Estep

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2806 - TX 1005										
Calibration Blank (P3C2806-CCB1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	5.48		mg/kg							
>C12-C28	12.8		"							
Surrogate: 1-Chlorooctane	*104*		*"*	*100*		*104*	*70-130*			
Surrogate: o-Terphenyl	*63.3*		*"*	*50.0*		*127*	*70-130*			
Calibration Blank (P3C2806-CCB2)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	8.58		mg/kg							
>C12-C28	8.78		"							
Surrogate: 1-Chlorooctane	*101*		*"*	*100*		*101*	*70-130*			
Surrogate: o-Terphenyl	*62.1*		*"*	*50.0*		*124*	*70-130*			
Calibration Check (P3C2806-CCV1)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	484	25.0	mg/kg	500		96.9	85-115			
>C12-C28	493	25.0	"	500		98.6	85-115			
Surrogate: 1-Chlorooctane	*129*		*"*	*100*		*129*	*70-130*			
Surrogate: o-Terphenyl	*64.1*		*"*	*50.0*		*128*	*70-130*			
Calibration Check (P3C2806-CCV2)				Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	472	25.0	mg/kg	500		94.5	85-115			
>C12-C28	488	25.0	"	500		97.6	85-115			
Surrogate: 1-Chlorooctane	*125*		*"*	*100*		*125*	*70-130*			
Surrogate: o-Terphenyl	*64.7*		*"*	*50.0*		*129*	*70-130*			
Matrix Spike (P3C2806-MS1)		**Source: 3C24008-44**		Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	743	25.8	mg/kg dry	1030	ND	72.0	75-125			QM-05
>C12-C28	985	25.8	"	1030	ND	95.6	75-125			
Surrogate: 1-Chlorooctane	*125*		*"*	*103*		*121*	*70-130*			
Surrogate: o-Terphenyl	*64.0*		*"*	*51.5*		*124*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
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Odessa TX, 79765	Project Manager: Blake Estep

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2806 - TX 1005										
Matrix Spike Dup (P3C2806-MSD1)	**Source: 3C24008-44**			Prepared: 03/28/23 Analyzed: 03/29/23						
C6-C12	743	25.8	mg/kg dry	1030	ND	72.1	75-125	0.0749	20	QM-05
>C12-C28	980	25.8	"	1030	ND	95.0	75-125	0.590	20	
Surrogate: 1-Chlorooctane	*126*		*"*	*103*		*122*	*70-130*			
Surrogate: o-Terphenyl	*66.5*		*"*	*51.5*		*129*	*70-130*			
Batch P3C2908 - TX 1005										
Blank (P3C2908-BLK1)				Prepared: 03/29/23 Analyzed: 03/30/23						
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*92.5*		*"*	*100*		*92.5*	*70-130*			
Surrogate: o-Terphenyl	*51.4*		*"*	*50.0*		*103*	*70-130*			
LCS (P3C2908-BS1)				Prepared: 03/29/23 Analyzed: 03/30/23						
C6-C12	791	25.0	mg/kg	1000		79.1	75-125			
>C12-C28	1030	25.0	"	1000		103	75-125			
Surrogate: 1-Chlorooctane	*117*		*"*	*100*		*117*	*70-130*			
Surrogate: o-Terphenyl	*58.9*		*"*	*50.0*		*118*	*70-130*			
LCS Dup (P3C2908-BSD1)				Prepared: 03/29/23 Analyzed: 03/30/23						
C6-C12	782	25.0	mg/kg	1000		78.2	75-125	1.13	20	
>C12-C28	1020	25.0	"	1000		102	75-125	0.682	20	
Surrogate: 1-Chlorooctane	*117*		*"*	*100*		*117*	*70-130*			
Surrogate: o-Terphenyl	*56.7*		*"*	*50.0*		*113*	*70-130*			
Calibration Blank (P3C2908-CCB1)				Prepared & Analyzed: 03/29/23						
C6-C12	5.97		mg/kg							
>C12-C28	8.85		"							
Surrogate: 1-Chlorooctane	*90.4*		*"*	*100*		*90.4*	*70-130*			
Surrogate: o-Terphenyl	*49.7*		*"*	*50.0*		*99.4*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
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Odessa TX, 79765	Project Manager: Blake Estep

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2908 - TX 1005										
Calibration Blank (P3C2908-CCB2)				Prepared: 03/29/23 Analyzed: 03/30/23						
C6-C12	6.31		mg/kg							
>C12-C28	10.5		"							
Surrogate: 1-Chlorooctane	*91.4*		*"*	*100*		*91.4*	*70-130*			
Surrogate: o-Terphenyl	*50.9*		*"*	*50.0*		*102*	*70-130*			
Calibration Check (P3C2908-CCV1)				Prepared & Analyzed: 03/29/23						
C6-C12	488	25.0	mg/kg	500		97.7	85-115			
>C12-C28	514	25.0	"	500		103	85-115			
Surrogate: 1-Chlorooctane	*116*		*"*	*100*		*116*	*70-130*			
Surrogate: o-Terphenyl	*56.8*		*"*	*50.0*		*114*	*70-130*			
Calibration Check (P3C2908-CCV2)				Prepared: 03/29/23 Analyzed: 03/30/23						
C6-C12	486	25.0	mg/kg	500		97.2	85-115			
>C12-C28	513	25.0	"	500		103	85-115			
Surrogate: 1-Chlorooctane	*116*		*"*	*100*		*116*	*70-130*			
Surrogate: o-Terphenyl	*55.6*		*"*	*50.0*		*111*	*70-130*			
Calibration Check (P3C2908-CCV3)				Prepared: 03/29/23 Analyzed: 03/30/23						
C6-C12	494	25.0	mg/kg	500		98.8	85-115			
>C12-C28	537	25.0	"	500		107	85-115			
Surrogate: 1-Chlorooctane	*119*		*"*	*100*		*119*	*70-130*			
Surrogate: o-Terphenyl	*58.2*		*"*	*50.0*		*116*	*70-130*			
Matrix Spike (P3C2908-MS1)		**Source: 3C27003-13**		Prepared: 03/29/23 Analyzed: 03/30/23						
C6-C12	658	26.9	mg/kg dry	1080	ND	61.2	75-125			QM-05
>C12-C28	897	26.9	"	1080	ND	83.5	75-125			
Surrogate: 1-Chlorooctane	*102*		*"*	*108*		*95.2*	*70-130*			
Surrogate: o-Terphenyl	*51.5*		*"*	*53.8*		*95.9*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
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Odessa TX, 79765	Project Manager: Blake Estep

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2908 - TX 1005										
Matrix Spike Dup (P3C2908-MSD1)	**Source: 3C27003-13**			Prepared: 03/29/23 Analyzed: 03/30/23						
C6-C12	693	26.9	mg/kg dry	1080	ND	64.4	75-125	5.17	20	QM-05
>C12-C28	936	26.9	"	1080	ND	87.0	75-125	4.17	20	
Surrogate: 1-Chlorooctane	*105*		*"*	*108*		*97.3*	*70-130*			
Surrogate: o-Terphenyl	*51.5*		*"*	*53.8*		*95.8*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2801 - * DEFAULT PREP *** **										
Blank (P3C2801-BLK1)				Prepared & Analyzed: 03/28/23						
% Moisture	ND	0.1	%							
Duplicate (P3C2801-DUP1)		**Source: 3C27007-01**		Prepared & Analyzed: 03/28/23						
% Moisture	7.0	0.1	%		7.0			0.00	20	
Duplicate (P3C2801-DUP2)		**Source: 3C27003-10**		Prepared & Analyzed: 03/28/23						
% Moisture	5.0	0.1	%		6.0			18.2	20	
Batch P3C2803 - * DEFAULT PREP *** **										
Blank (P3C2803-BLK1)				Prepared & Analyzed: 03/28/23						
% Moisture	ND	0.1	%							
Blank (P3C2803-BLK2)				Prepared & Analyzed: 03/28/23						
% Moisture	ND	0.1	%							
Blank (P3C2803-BLK3)				Prepared & Analyzed: 03/28/23						
% Moisture	ND	0.1	%							
Blank (P3C2803-BLK4)				Prepared & Analyzed: 03/28/23						
% Moisture	ND	0.1	%							
Blank (P3C2803-BLK5)				Prepared & Analyzed: 03/28/23						
% Moisture	ND	0.1	%							
Duplicate (P3C2803-DUP1)		**Source: 3C24008-10**		Prepared & Analyzed: 03/28/23						
% Moisture	2.0	0.1	%		2.0			0.00	20	

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2803 - * DEFAULT PREP *** **										
Duplicate (P3C2803-DUP2)		**Source: 3C24008-20**		Prepared & Analyzed: 03/28/23						
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P3C2803-DUP3)		**Source: 3C24008-35**		Prepared & Analyzed: 03/28/23						
% Moisture	5.0	0.1	%		4.0			22.2	20	R3
Duplicate (P3C2803-DUP4)		**Source: 3C24008-45**		Prepared & Analyzed: 03/28/23						
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P3C2803-DUP5)		**Source: 3C27003-25**		Prepared & Analyzed: 03/28/23						
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P3C2803-DUP6)		**Source: 3C27003-35**		Prepared & Analyzed: 03/28/23						
% Moisture	7.0	0.1	%		8.0			13.3	20	
Duplicate (P3C2803-DUP7)		**Source: 3C27004-10**		Prepared & Analyzed: 03/28/23						
% Moisture	6.0	0.1	%		5.0			18.2	20	
Duplicate (P3C2803-DUP8)		**Source: 3C27004-20**		Prepared & Analyzed: 03/28/23						
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P3C2803-DUP9)		**Source: 3C27013-02**		Prepared & Analyzed: 03/28/23						
% Moisture	16.0	0.1	%		16.0			0.00	20	
Duplicate (P3C2803-DUPA)		**Source: 3C27014-10**		Prepared & Analyzed: 03/28/23						
% Moisture	11.0	0.1	%		12.0			8.70	20	
Batch P3C2914 - * DEFAULT PREP *** **										
Blank (P3C2914-BLK1)				Prepared: 03/29/23 Analyzed: 03/30/23						
Chloride	ND	1.00	mg/kg							

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2914 - * DEFAULT PREP *** **										
LCS (P3C2914-BS1)				Prepared: 03/29/23 Analyzed: 03/30/23						
Chloride	21.1		mg/kg	20.0		106	90-110			
LCS Dup (P3C2914-BSD1)				Prepared: 03/29/23 Analyzed: 03/30/23						
Chloride	21.2		mg/kg	20.0		106	90-110	0.142	10	
Calibration Check (P3C2914-CCV1)				Prepared: 03/29/23 Analyzed: 03/30/23						
Chloride	21.7		mg/kg	20.0		109	90-110			
Calibration Check (P3C2914-CCV2)				Prepared: 03/29/23 Analyzed: 04/01/23						
Chloride	18.7		mg/kg	20.0		93.6	90-110			
Matrix Spike (P3C2914-MS1)		**Source: 3C27003-35**		Prepared: 03/29/23 Analyzed: 03/30/23						
Chloride	31.3		mg/kg	5.00	24.2	142	80-120			QM-05
Matrix Spike (P3C2914-MS2)		**Source: 3C24008-05**		Prepared: 03/29/23 Analyzed: 04/01/23						
Chloride	45.2		mg/kg	2.50	43.2	81.7	80-120			
Matrix Spike Dup (P3C2914-MSD1)		**Source: 3C27003-35**		Prepared: 03/29/23 Analyzed: 03/30/23						
Chloride	31.0		mg/kg	5.00	24.2	135	80-120	1.15	20	QM-05
Matrix Spike Dup (P3C2914-MSD2)		**Source: 3C24008-05**		Prepared: 03/29/23 Analyzed: 04/01/23						
Chloride	44.4		mg/kg	2.50	43.2	50.0	80-120	1.77	20	QM-05
Batch P3C2915 - * DEFAULT PREP *** **										
Blank (P3C2915-BLK1)				Prepared: 03/29/23 Analyzed: 04/02/23						
Chloride	ND	1.00	mg/kg							

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C2915 - * DEFAULT PREP *** **										
LCS (P3C2915-BS1)				Prepared: 03/29/23 Analyzed: 04/01/23						
Chloride	21.2		mg/kg	20.0		106	90-110			
LCS Dup (P3C2915-BSD1)				Prepared: 03/29/23 Analyzed: 04/01/23						
Chloride	20.7		mg/kg	20.0		103	90-110	2.36	10	
Calibration Check (P3C2915-CCV1)				Prepared: 03/29/23 Analyzed: 04/01/23						
Chloride	21.6		mg/kg	20.0		108	90-110			
Calibration Check (P3C2915-CCV2)				Prepared: 03/29/23 Analyzed: 04/01/23						
Chloride	21.7		mg/kg	20.0		109	90-110			
Matrix Spike (P3C2915-MS1)		**Source: 3C24008-25**		Prepared: 03/29/23 Analyzed: 04/01/23						
Chloride	13.0		mg/kg	5.00	7.99	100	80-120			
Matrix Spike Dup (P3C2915-MSD1)		**Source: 3C24008-25**		Prepared: 03/29/23 Analyzed: 04/01/23						
Chloride	13.2		mg/kg	5.00	7.99	105	80-120	1.84	20	
Batch P3C3006 - * DEFAULT PREP *** **										
Blank (P3C3006-BLK1)				Prepared: 03/30/23 Analyzed: 04/01/23						
Chloride	ND	1.00	mg/kg							
LCS (P3C3006-BS1)				Prepared: 03/30/23 Analyzed: 04/01/23						
Chloride	19.6		mg/kg	20.0		98.0	90-110			
LCS Dup (P3C3006-BSD1)				Prepared: 03/30/23 Analyzed: 04/01/23						
Chloride	19.7		mg/kg	20.0		98.3	90-110	0.275	10	

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3C3006 - * DEFAULT PREP *** **										
Calibration Check (P3C3006-CCV1)				Prepared: 03/30/23 Analyzed: 04/01/23						
Chloride	19.0		mg/kg	20.0		95.2	90-110			
Calibration Check (P3C3006-CCV2)				Prepared: 03/30/23 Analyzed: 04/02/23						
Chloride	19.3		mg/kg	20.0		96.4	90-110			
Calibration Check (P3C3006-CCV3)				Prepared: 03/30/23 Analyzed: 04/02/23						
Chloride	19.3		mg/kg	20.0		96.7	90-110			
Matrix Spike (P3C3006-MS1)		**Source: 3C24008-35**		Prepared: 03/30/23 Analyzed: 04/02/23						
Chloride	60.5	1.04	mg/kg dry	52.1	13.8	89.6	80-120			
Matrix Spike (P3C3006-MS2)		**Source: 3C24008-45**		Prepared: 03/30/23 Analyzed: 04/02/23						
Chloride	554	1.04	mg/kg dry	26.0	530	93.3	80-120			
Matrix Spike Dup (P3C3006-MSD1)		**Source: 3C24008-35**		Prepared: 03/30/23 Analyzed: 04/02/23						
Chloride	61.6	1.04	mg/kg dry	52.1	13.8	91.7	80-120	1.83	20	
Matrix Spike Dup (P3C3006-MSD2)		**Source: 3C24008-45**		Prepared: 03/30/23 Analyzed: 04/02/23						
Chloride	551	1.04	mg/kg dry	26.0	530	79.5	80-120	0.649	20	QM-05

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
ROI	Received on Ice
R3	The RPD exceeded the acceptance limit due to sample matrix effects.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
NPBEL C(	Chain of Custody was not generated at PBELAB
BULK	Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 4/5/2023

Brent Barron, Laboratory Director/Technical Director

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

PBELAB Permian Basin Environmental Lab, LP
1400 Rankin Hwy Midland Texas 79701 Phone: 432-686-7235

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST 1 of 4

Project Manager: Blake Estep
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Address: P.O. Box 62228
City/State/Zip: Midland, Texas 79711
Sampler Signature: _____ email: blake@etechenv.com

Project Name: Benson Shugart Waterflood Unit #015
Project #: 15306 Project Loc: New Mexico
Area: PO#: 15306
☒ Bill Etech

Report Format: STANDARD☒ TRRP:☐ NPDES:☐

(lab use only)
ORDER #: 3C24008

LAB # (lab use only)	FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-PotableSpecify Other	Analyze For: TPH: 418.1 / 8015M / 1005 / 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi volatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides	RUSH TAT(Pre-Schedule) 24, 48, 72 hrs	STANDARD TAT
1	Bottom Hole 1		5'	3/23/2023	12:00	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
2	Bottom Hole 2		5'	3/23/2023	12:02	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
3	Bottom Hole 3		5'	3/23/2023	12:04	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
4	Bottom Hole 4		5'	3/23/2023	12:06	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
5	Bottom Hole 5		5'	3/23/2023	12:08	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
6	Bottom Hole 6		5'	3/23/2023	12:10	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
7	Bottom Hole 7		5'	3/23/2023	12:12	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
8	Bottom Hole 8		5'	3/23/2023	12:14	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
9	Bottom Hole 9		5'	3/23/2023	12:16	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
10	Bottom Hole 10		5'	3/23/2023	12:18	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
11	Bottom Hole 11		6'	3/23/2023	12:20	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
12	Bottom Hole 12		6'	3/23/2023	12:22	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
13	Bottom Hole 13		7'	3/23/2023	12:24	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X
14	Bottom Hole 14		7'	3/23/2023	12:26	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Delta Petty	3/23/24	11:45			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: Dixie Bledsoe	3/23/24	11:45

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
Sar by Sampler/Client Rep. ?		Y N

Sar by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 3.0 NCF 3 °C

PBELAB Permian Basin Environmental Lab, LP

1400 Rankin Hwy Midland Texas 79701 Phone: 432-686-7235

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST 2 of 4

Project Manager: Blake Estep
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Address: P.O. Box 62228
City/State/Zip: Midland, Texas 79711
Sampler Signature: _____ email: ___blake@etechenv.com

Project Name:Benson Shugart Waterflood Unit #015
Project #: 15306 Project Loc:
Area: PO#: 15306

☒ Bill Etech

Report Format: STANDARD:☐ TRRP:☐ NPDES:☐

(lab use only)
ORDER #: 3C24008

LAB # (lab use only)	FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	Preservation & # of Containers: No. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-PotableSpecify Other	Analyze For: TPH: 418.1 (8015M) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi volatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides		RUSH TAT(Pre-Schedule) 24, 48, 72 hrs	STANDARD TAT
15	Bottom Hole 15		7'	3/23/2023	12:28	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
16	Bottom Hole 16		6'	3/23/2023	12:30	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
17	Bottom Hole 17		6'	3/23/2023	12:32	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
18	Bottom Hole 18		6'	3/23/2023	12:34	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
19	Bottom Hole 19		6'	3/23/2023	12:36	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
20	Bottom Hole 20		6'	3/23/2023	12:38	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
21	Bottom Hole 21		6'	3/23/2023	12:40	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
22	Bottom Hole 22		5'	3/23/2023	12:42	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
23	Bottom Hole 23		4'	3/23/2023	12:44	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
24	Bottom Hole 24		4'	3/23/2023	12:46	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
25	Bottom Hole 25		4'	3/23/2023	12:48	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
26	Bottom Hole 26		4'	3/23/2023	12:50	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
27	Bottom Hole 27		4'	3/23/2023	12:52	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
28	North Sidewall 1		3'	3/23/2023	12:54	1	X	☐	☐	☐	☐	☐	☐	☐	S			X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dalton Pettit	3/23/24	11:47			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: Alisa Bledsoe	3/23/24	11:47

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
Sar by Sampler/Client Rep. ?	Y	N

Sar by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 3.0 °C NCF BT

PBELAB Permian Basin Environmental Lab, LP

1400 Rankin Hwy Midland Texas 79701 Phone: 432-686-7235

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Blake Estep
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Address: P.O. Box 62228
City/State/Zip: Midland, Texas 79711
Sampler Signature: _____ email: ___blake@etechenv.com

Project Name:Benson Shugart Waterflood Unit #015
Project #: 15306 Project Loc:
Area: PO#: 15306

☒Bill Etech

Report Format: STANDARD:☐ TRRP:☐ NPDES:☐

(lab use only)
ORDER #: 3C24008

LAB # (lab use only)	FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	Preservation & # of Containers: No. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge / GW = Groundwater S=Soil/Solid / NP=Non-Potable Specify Other	Analyze For: TCLP: ☐ ☐ ☐ ☐ / TOTAL: ☐ ☐ ☐ ☐ — TPH: 418(1) 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi volatiles	BTEX 8021B 5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides		RUSH TAT(Pre-Schedule) 24, 48, 72 hrs		STANDARD TAT
29	North Sidewall 2		3'	3/23/2023	12:56	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
30	North Sidewall 3		3'	3/23/2023	12:58	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
31	North Sidewall 4		3'	3/23/2023	13:00	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
32	North Sidewall 5		3'	3/23/2023	13:02	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
33	North Sidewall 6		3'	3/23/2023	13:04	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
34	North Sidewall 7		3'	3/23/2023	13:06	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
35	North Sidewall 8		3'	3/23/2023	13:08	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
36	North Sidewall 9		3'	3/23/2023	13:10	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
37	North Sidewall 10		3'	3/23/2023	13:12	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
38	North Sidewall 11		3'	3/23/2023	13:14	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
39	East Sidewall		3'	3/23/2023	13:16	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
40	South Sidewall 1		3'	3/23/2023	13:18	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
41	South Sidewall 2		3'	3/23/2023	13:20	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X
42	South Sidewall 3		3'	3/23/2023	13:22	1	X	☐	☐	☐	☐	☐	☐	☐	S	X	☐	☐	☐	☐	☐	☐	X	☐	☐	X	☐	☐	☐	X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
DeHon Petty	3/24/23	11:46			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
			Trina Bledsoe	3/24/23	11:46

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
Sar by Sampler/Client Rep. ?	Y	N

Sar by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 3.0 °C

PBELAB Permian Basin Environmental Lab, LP
1400 Rankin Hwy Midland Texas 79701 Phone: 432-686-7235

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

4 of 4

Project Manager: Blake Estep
Company Name: Etech Environmental & Safety Solutions, Inc.
Company Address: P.O. Box 62228
City/State/Zip: Midland, Texas 79711
Sampler Signature: [signature] email: blake@etechenv.com

Project Name: Benson Shugart Waterflood Unit #015
Project #: 15306 Project Loc:
Area: PO#: 15306
☒ Bill Etech

Report Format: STANDARD: ☐ TRRP: ☐ NPDES: ☐

(lab use only)
ORDER #: 3C24008

Analyze For: TCLP: ☐ ☐ ☐ ☐ TOTAL: ☐ ☐ ☐ ☐

LAB # (lab use only)	FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	No. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge; GW = Groundwater S=Soil/Solid; NP=Non-Potable Specify Other)	TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi volatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides			RUSH TAT(Pre-Schedule) 24, 48, 72 hrs	STANDARD TAT
43	South Sidewall 4		3'	3/23/2023	13:24	1	X								S	X							X			X				X
44	South Sidewall 5		3'	3/23/2023	13:26	1	X								S	X							X			X				X
45	South Sidewall 6		3'	3/23/2023	13:28	1	X								S	X							X			X				X
46	South Sidewall 7		3'	3/23/2023	13:30	1	X								S	X							X			X				X
47	South Sidewall 8		3'	3/23/2023	13:32	1	X								S	X							X			X				X
48	South Sidewall 9		3'	3/23/2023	13:34	1	X								S	X							X			X				X
49	South Sidewall 10		3'	3/23/2023	13:36	1	X								S	X							X			X				X
50	South Sidewall 11		3'	3/23/2023	13:38	1	X								S	X							X			X				X
51	West Sidewall		3'	3/23/2023	13:40	1	X								S	X							X			X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Dalton Petty	3/24/23	11:47			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: Oryna Bledsoe	3/24/23	11:47

Laboratory Comments:

Sample Containers Intact?	(Y)	N
VOCs Free of Headspace?	(Y)	N
Custody seals on container(s)	(Y)	N
Custody seals on cooler(s)	(Y)	N
Sample Hand Delivered	(Y)	N
Sar by Sampler/Client Rep. ?	Y	N
Sar by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 3.0 °C NCF

PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701

PBELAB

Analytical Report

Prepared for:

Blake Estep

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100

Odessa, TX 79765

Project: Benson Shugart Waterflood Unit #015

Project Number: 15306

Location:

Lab Order Number: 3D26014

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 05/04/23

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom Hole -4 @ 6'	3D26014-01	Soil	04/25/23 12:00	04-26-2023 16:11
Bottom Hole -13 @ 8'	3D26014-02	Soil	04/25/23 12:02	04-26-2023 16:11
Bottom Hole -15 @ 8'	3D26014-03	Soil	04/25/23 12:04	04-26-2023 16:11
Bottom Hole -16 @ 7'	3D26014-04	Soil	04/25/23 12:06	04-26-2023 16:11
Bottom Hole -19 @ 7'	3D26014-05	Soil	04/25/23 12:08	04-26-2023 16:11
South Sidewall -2 @ 3'	3D26014-06	Soil	04/25/23 12:10	04-26-2023 16:11
South Sidewall -3 @ 3'	3D26014-07	Soil	04/25/23 12:12	04-26-2023 16:11
South Sidewall -5 @ 3'	3D26014-08	Soil	04/25/23 12:14	04-26-2023 16:11

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -4 @ 6'

3D26014-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**164**	7.14	mg/kg dry	1	P3E0103	04/28/23 15:00	05/02/23 09:24	EPA 300.0	
% Moisture	ND	0.1	%	1	P3D2702	04/27/23 09:50	04/27/23 10:13	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -13 @ 8'

3D26014-02 (Soil)

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	**12.9**	1.01	mg/kg dry	1	P3E0103	04/28/23 15:00	05/02/23 09:38	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P3D2702	04/27/23 09:50	04/27/23 10:13	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -15 @ 8'

3D26014-03 (Soil)

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	**14.5**	1.01	mg/kg dry	1	P3E0111	05/01/23 08:00	05/03/23 17:06	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P3D2702	04/27/23 09:50	04/27/23 10:13	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -16 @ 7'

3D26014-04 (Soil)

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	**42.6**	1.01	mg/kg dry	1	P3E0111	05/01/23 08:00	05/03/23 17:20	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P3D2702	04/27/23 09:50	04/27/23 10:13	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole -19 @ 7'

3D26014-05 (Soil)

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	**16.3**	1.01	mg/kg dry	1	P3E0111	05/01/23 08:00	05/03/23 17:35	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P3D2702	04/27/23 09:50	04/27/23 10:13	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -2 @ 3'

3D26014-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**17.9**	1.01	mg/kg dry	1	P3E0111	05/01/23 08:00	05/03/23 17:49	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P3D2702	04/27/23 09:50	04/27/23 10:13	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -3 @ 3'

3D26014-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Permian Basin Environmental Lab, L.P.									
General Chemistry Parameters by EPA / Standard Methods									
Chloride	ND	1.01	mg/kg dry	1	P3E0111	05/01/23 08:00	05/03/23 18:03	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P3D2702	04/27/23 09:50	04/27/23 10:13	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

South Sidewall -5 @ 3'

3D26014-08 (Soil)

Permian Basin Environmental Lab, L.P.

General Chemistry Parameters by EPA / Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	ND	1.01	mg/kg dry	1	P3E0111	05/01/23 08:00	05/03/23 18:17	EPA 300.0	
% Moisture	**1.0**	0.1	%	1	P3D2702	04/27/23 09:50	04/27/23 10:13	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3D2702 - * DEFAULT PREP *** **										
Blank (P3D2702-BLK1)				Prepared & Analyzed: 04/27/23						
% Moisture	ND	0.1	%							
Blank (P3D2702-BLK2)				Prepared & Analyzed: 04/27/23						
% Moisture	ND	0.1	%							
Blank (P3D2702-BLK3)				Prepared & Analyzed: 04/27/23						
% Moisture	ND	0.1	%							
Duplicate (P3D2702-DUP1)		**Source: 3D26001-05**		Prepared & Analyzed: 04/27/23						
% Moisture	12.0	0.1	%		11.0			8.70	20	
Duplicate (P3D2702-DUP2)		**Source: 3D26003-07**		Prepared & Analyzed: 04/27/23						
% Moisture	12.0	0.1	%		12.0			0.00	20	
Duplicate (P3D2702-DUP3)		**Source: 3D26009-01**		Prepared & Analyzed: 04/27/23						
% Moisture	2.0	0.1	%		1.0			66.7	20	
Duplicate (P3D2702-DUP4)		**Source: 3D26012-06**		Prepared & Analyzed: 04/27/23						
% Moisture	14.0	0.1	%		14.0			0.00	20	
Duplicate (P3D2702-DUP5)		**Source: 3D26015-02**		Prepared & Analyzed: 04/27/23						
% Moisture	4.0	0.1	%		4.0			0.00	20	
Batch P3E0103 - * DEFAULT PREP *** **										
Blank (P3E0103-BLK1)				Prepared: 04/28/23 Analyzed: 05/01/23						
Chloride	ND	1.00	mg/kg							

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3E0103 - * DEFAULT PREP *** **										
LCS (P3E0103-BS1)				Prepared: 04/28/23 Analyzed: 05/01/23						
Chloride	17.9		mg/kg	18.0		99.2	90-110			
LCS Dup (P3E0103-BSD1)				Prepared: 04/28/23 Analyzed: 05/01/23						
Chloride	17.9		mg/kg	18.0		99.7	90-110	0.486	10	
Calibration Check (P3E0103-CCV1)				Prepared: 04/28/23 Analyzed: 05/01/23						
Chloride	17.4		mg/kg	18.0		96.4	90-110			
Calibration Check (P3E0103-CCV2)				Prepared: 04/28/23 Analyzed: 05/01/23						
Chloride	17.0		mg/kg	18.0		94.4	90-110			
Matrix Spike (P3E0103-MS1)		**Source: 3D26003-05**		Prepared: 04/28/23 Analyzed: 05/01/23						
Chloride	160		mg/kg	100	45.7	114	80-120			
Matrix Spike (P3E0103-MS2)		**Source: 3D26011-01**		Prepared: 04/28/23 Analyzed: 05/01/23						
Chloride	133		mg/kg	100	27.2	106	80-120			
Matrix Spike Dup (P3E0103-MSD1)		**Source: 3D26003-05**		Prepared: 04/28/23 Analyzed: 05/01/23						
Chloride	160		mg/kg	100	45.7	114	80-120	0.0868	20	
Matrix Spike Dup (P3E0103-MSD2)		**Source: 3D26011-01**		Prepared: 04/28/23 Analyzed: 05/01/23						
Chloride	135		mg/kg	100	27.2	108	80-120	1.02	20	
Batch P3E0111 - * DEFAULT PREP *** **										
Blank (P3E0111-BLK1)				Prepared: 05/01/23 Analyzed: 05/03/23						
Chloride	ND	1.00	mg/kg							

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P3E0111 - * DEFAULT PREP *** **										
LCS (P3E0111-BS1)				Prepared: 05/01/23 Analyzed: 05/03/23						
Chloride	17.5		mg/kg	18.0		97.4	90-110			
LCS Dup (P3E0111-BSD1)				Prepared: 05/01/23 Analyzed: 05/03/23						
Chloride	17.1		mg/kg	18.0		94.8	90-110	2.70	10	
Calibration Check (P3E0111-CCV1)				Prepared: 05/01/23 Analyzed: 05/03/23						
Chloride	17.6		mg/kg	18.0		97.9	90-110			
Calibration Check (P3E0111-CCV2)				Prepared: 05/01/23 Analyzed: 05/03/23						
Chloride	17.2		mg/kg	18.0		95.4	90-110			
Matrix Spike (P3E0111-MS1)		**Source: 3D26016-01**		Prepared: 05/01/23 Analyzed: 05/03/23						
Chloride	19500	1.20	mg/kg dry	12000	6870	105	80-120			
Matrix Spike (P3E0111-MS2)		**Source: 3D26016-05**		Prepared: 05/01/23 Analyzed: 05/03/23						
Chloride	40100	1.20	mg/kg dry	30100	9610	101	80-120			
Matrix Spike Dup (P3E0111-MSD1)		**Source: 3D26016-01**		Prepared: 05/01/23 Analyzed: 05/03/23						
Chloride	20100	1.20	mg/kg dry	12000	6870	110	80-120	3.27	20	
Matrix Spike Dup (P3E0111-MSD2)		**Source: 3D26016-05**		Prepared: 05/01/23 Analyzed: 05/03/23						
Chloride	41600	1.20	mg/kg dry	30100	9610	106	80-120	3.65	20	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Benson Shugart Waterflood Unit #015
13000 West County Road 100	Project Number: 15306
Odessa TX, 79765	Project Manager: Blake Estep

Notes and Definitions

ROI	Received on Ice
NPBEL C(	Chain of Custody was not generated at PBELAB
BULK	Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 5/4/2023

Brent Barron, Laboratory Director/Technical Director

PBELAB Permian Basin Environmental Lab, LP

1400 Rankin Hwy Midland Texas 79701 Phone: 432-686-7235

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Blake Estep

Company Name: Etech Environmental & Safety Solutions, Inc.

Company Address: P.O. Box 62228

City/State/Zip: Midland, Texas, 79711

Sampler Signature: [signature] for PP email: blake@etechenv.com

Project Name: Benson Shugart Waterflood Unit #15

Project #: 15306 Project Loc:

Area: PO#: 15306

☑ Bill Etech

Report Format: STANDARD: ☒ TRRP: ☐ NPDES: ☐

(lab use only)
ORDER #: 3D26014

LAB # (lab use only)	FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	No. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge; GW = Groundwater S=Soil/Solid; NP=Non-Potable Specify Other)	TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi volatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	STANDARD TAT
1	Bottom Hole 4		6'	4-25-23	12:00	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☒
2	Bottom Hole 13		8'		12:02	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☒
3	Bottom Hole 15		8'		12:04	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☒
4	Bottom Hole 16		7'		12:06	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☒
5	Bottom Hole 19		7'		12:08	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☒
6	South Sidewall 2		3'		12:10	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☒
7	South Sidewall 3		3'		12:12	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☒
8	South Sidewall 5		3'		12:14	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☒

TCLP: ☐ ☐ ☐ ☐ TOTAL: ☐ ☐ ☐ ☐

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/26/23	16:11			
			[signature] Teresa Bledsoe	4/26/23	16:11

Laboratory Comments:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
Sar by Sampler/Client Rep. ? Y N
Sar by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 5.2 NCF 4.3 °C

APPENDIX F

Approved Remediation Work Plan

P.O. Box 62228 Midland • TX • 79711 • Tel: 432-563-2200 • Fax: 432-563-2213

July 15, 2022

Robert Hamlet
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505
PH #: 575-748-1283
Robert.Hamlet@state.nm.us

Re: Soil Remediation Workplan
Chevron USA
Benson Shugart Waterflood Unit #015 Release (nMLB0526441458)
GPS: N 32.71542° W 103.93081°
Unit Letter "L", Section 25, Township 18 South, Range 30 East
Eddy County, New Mexico

Dear Mr. Hamlet,

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Chevron USA (Chevron), has prepared this Soil Remediation Workplan for the Benson Shugart Waterflood Unit #015 Release Site (Release Site). The legal description of the Release Site is Unit Letter "L", Section 25, Township 18 South, Range 30 East, in Eddy County, New Mexico. The GPS coordinates for the site are N 32.71542° W 103.93081°. A Site Location Map and Aerial Proximity Map are provided as Figure 1 and Figure 2, respectively.

INTRODUCTION

On August 14, 2005, a reportable release occurred at the Release Site. The release was the result of a pipeline failure and impacted the pasture adjacent to the lease road. Approximately two hundred (200) barrels (bbls) of produced water was released with approximately one hundred fifty (150) bbls recovered via vacuum trucks, for a net loss of fifty (50) bbls of produced water. The initial Form C-141 is provided in Appendix A.

NMOCD SITE CLASSIFICATION

NMOCD assessment and cleanup levels for hydrocarbon and produced water releases are based on depth to groundwater and karst status and follow the criteria in the revised August 2018 Title 19 Chapter 15 part 29 New Mexico Administrative Code (19.15.29 NMAC) regulations. Groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE), New Mexico Bureau of Geology & Mineral Resources (NMBGMR), and United States Geological Survey (USGS) were accessed to determine if any registered water wells were located within a half-mile of the site. The databases identified two (2) registered water wells within a ½-mile radius. No water wells were located within one thousand (1,000) ft of the release. The two wells located within a ½-mile of the site were USGS 324241103561201 & 324244103561601 with depths ranging from one hundred eighty-four (184) ft below ground surface (bgs) to two hundred five (205) ft bgs for an average depth of one hundred ninety-five (195) ft bgs. In addition, the site is listed as being in a high Karst Topography region. See Appendix B for maps, along with water well data, detailing the site relative to groundwater locations. Based on the NMOCD site classification system, the following soil remediation levels were assigned to the Release Site:

- Benzene – 10 mg/Kg (ppm)
- Total BTEX – 50 mg/Kg (ppm)
- Total TPH – 100 mg/Kg (ppm)
- Chloride – 600 mg/Kg (ppm)

INITIAL ASSESSMENT AND DELINEATION ACTIVITIES

On January 5, 2022, Etech was onsite to perform the initial assessment and delineation of the release. The release, located on Bureau of Land Management (BLM) property, measured approximately four hundred twenty-five (425) feet (ft) in length and five (5) to thirty (30) ft wide along the lease road. The surface dimensions covered an area of approximately 5,372 square feet. Four (4) auger holes (Auger Hole 1 through Auger Hole 4) were installed in the inferred spill area to a depth of forty-eight (48) inches bgs. Samples were collected and submitted to Europhins Laboratory in Midland, Texas for analysis of Benzene, Toulene, Ethylbenzene, and Xylenes (BTEX) by EPA method 8021B, Total Petroleum Hydrocarbons (TPH) by EPA method 8015M, and Chlorides by EPA method 300.0. Analytical concentrations for Benzene, Total BTEX, and TPH were below method detection limit (MDL) and/or the New Mexico Oil Conservation Division (NMOCD) remediation standards. The chloride concentrations were above the NMOCD remediation standard of 600 mg/Kg for all soil samples submitted and ranged from 889 mg/Kg for Auger Hole 4 (3.5'-4.0') to 17,100 mg/Kg for Auger Hole 4 (0-0.5'). See Appendix C for attached photos detailing release and impact to pad. See Figure 3 for Site Details Location Map. See Figure 4 for Delineation Plat.

On April 6 & 11, 2022, Etech further delineated the Release Site in an attempt to reach full chloride delineation. Four (4) auger holes (Auger Hole 1 through Auger Hole 4) were installed in the same area as the first delineation to a depth of seventy-two (72) inches bgs. In addition, six (6) auger holes (East, West, South, North) were installed in each cardinal direction in an attempt to determine the boundaries of the release, to a depth of forty-eight (48) inches bgs. Field chloride screening was conducted during delineation event. Samples were collected and submitted to Europhins in Midland, Texas for chloride analysis. The chloride concentrations were below the NMOCD remediation standard of 600 mg/Kg for

all samples analyzed and ranged from <4.95 mg/Kg for South Auger Hole 1 (3.5'-4') to 370 mg/Kg for Auger Hole 1 (5.5'-6') and Auger Hole 2 (5.5'-6'). See Figure 4 for Delineation Plat and Table 1 for analysis. See Appendix D for entire analytical results.

SOIL REMEDIATION WORKPLAN

Etech proposes to complete remediation in accordance with NMOCD rules and regulations which will entail the following:

- Impacted soils will be excavated to appropriate depths based on delineation data and stockpiled on plastic awaiting disposal.
- During excavation activities soils will be field screened utilizing chloride test kits and a PID meter for determination of laboratory sampling and additional excavation, if warranted.
- Upon completion of the excavation, confirmation soil samples will be collected every two hundred (200) square feet from the base and sidewalls (representing no more than 50 linear feet) of the excavated areas. Additional, discrete grab samples will be collected from wet or visibly stained areas inferred to have been affected by the release, as necessary. Samples will be submitted to Permian Basin Environmental Labs of Texas (PBELAB) for analysis of BTEX by EPA Method 8021B, TPH by EPA Method 8015M, and Chlorides by EPA method 300.0.
- The impacted soils will be transported off-site for disposal at an NMOCD approved disposal facilty. Estimated 1,350 cubic yards of impacted soils based on delineation results.
- Upon completion of remediation and requisite soil sampling, the site will be backfilled with locally sourced, non-impacted "like" material from an approved off-site facility and brought back to grade.
- A closure report with final C-141 will be submitted to the NMOCD upon completion of remediation activities.

Once the soil remediation work plan has been approved by the NMOCD, Chevron will commence remediation activities. Upon completion of remediation activities, Chevron will complete the activities within ninety (90) days of approval and submit a *"Remediation Summary and Site Closure Request Report"* to the NMOCD.

If you have any questions, or if additional information is required, please feel free to call me at 432-563-2200 (office) or 432-653-9697 (cell).

Thank you,

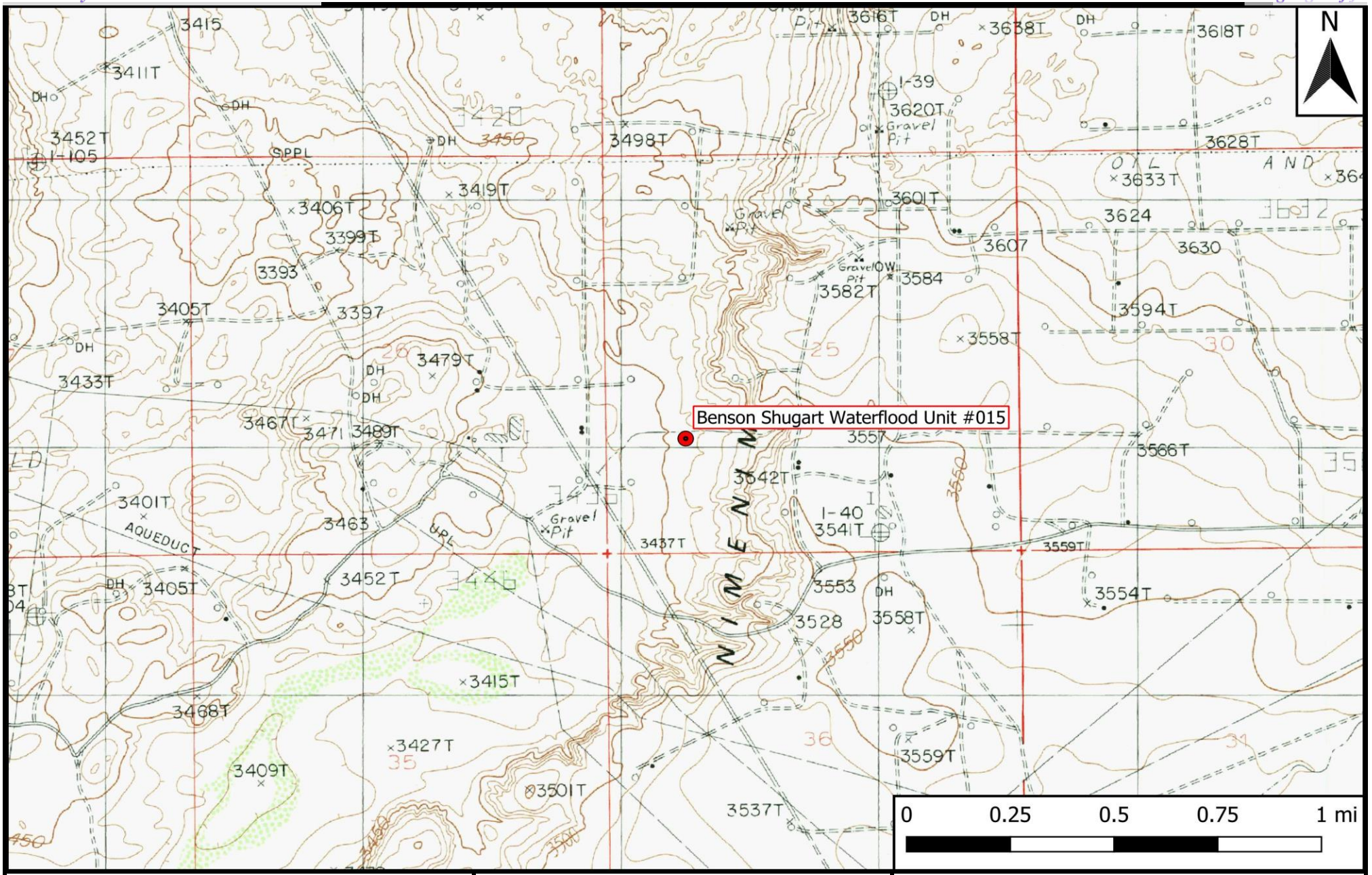
Jeffrey Kindley, P.G.
Senior Project Manager/Geologist
Etech Environmental & Safety Solutions, Inc.

Attachments:

Figure 1 – Topographic Map
Figure 2 – Aerial Proximity Map
Figure 3 – Site and Sample Location Map
Table 1 – Concentrations of BTEX, TPH, and Chloride in Soil
Appendix A: Initial Release Notification and Corrective Action Form C-141
Appendix B: Groundwater Data Maps and Supporting Water Well Data
Appendix C: Photographic Documentation
Appendix D: Laboratory Analytical

cc: File

Figure 1
Topographic Map



Legend

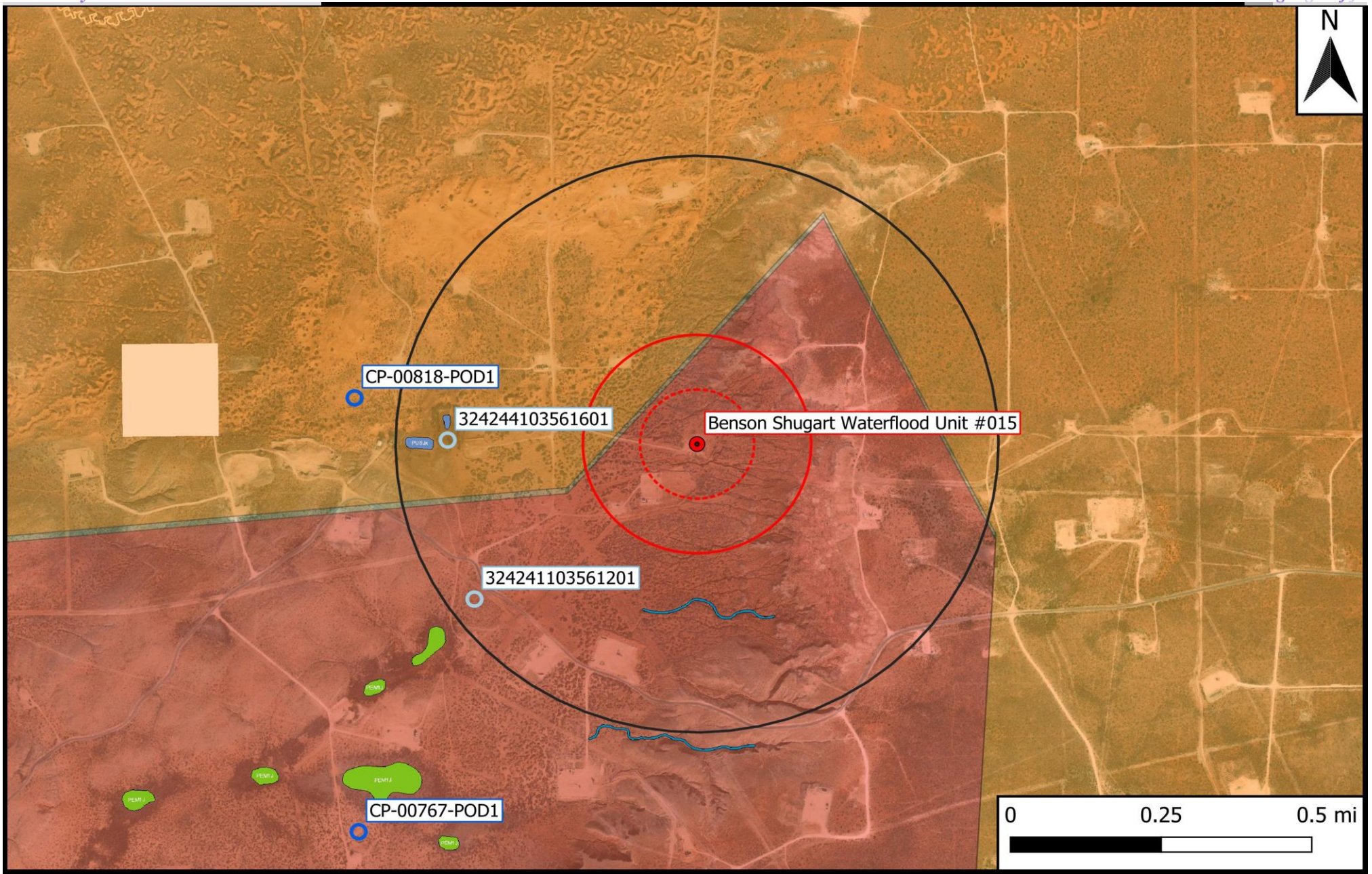
- Site Location

Figure 1
Topographic Map
Chevron Environmental Management Company
Benson Shugart Waterflood Unit #015
GPS: 32.715339, -103.930783
Eddy County

ETECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 6/29/22

Figure 2
Aerial Proximity Map



Legend

- Site Location
- Well - NMOSE
- Well - USGS
- Potash Mine Workings
- Medium/High Karst
- 500 Ft Radius
- 1000 Ft Radius
- 0.5 Mi Radius
- 1% Annual Flood Chance
- Lake/Freshwater Pond
- Emergent/Forested Wetlands
- Riverine

Figure 2

Aerial Proximity Map

Chevron Environmental Management Company

Benson Shugart Waterflood Unit #015

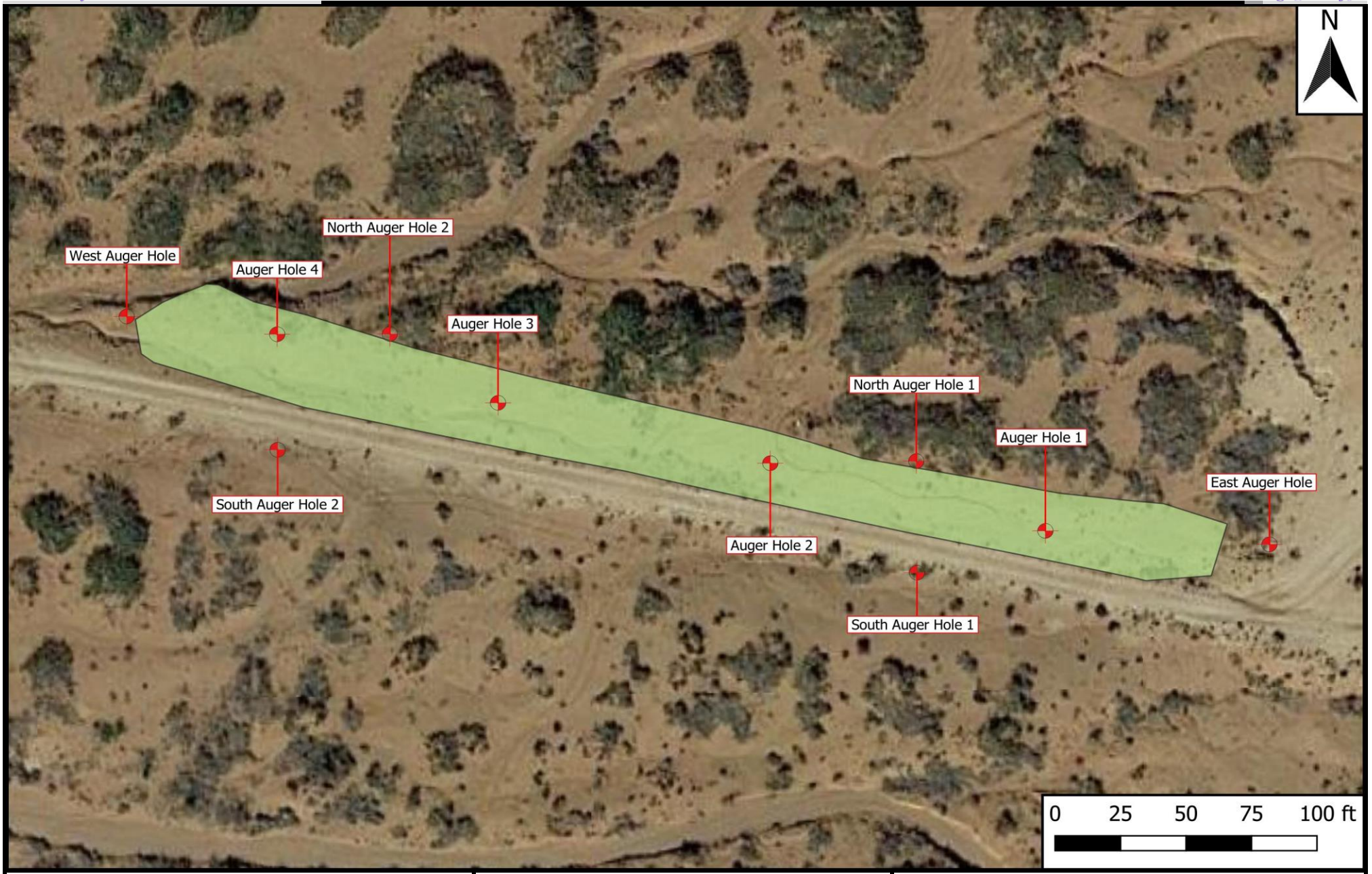
GPS: 32.715339, -103.930783

Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 6/29/22

Figure 3
Site and Sample Location Map



Legend

- Sample Point
- Release Area

Figure 3

Site and Sample Location Map

Chevron Environmental Management Company

Benson Shugart Waterflood Unit #015

GPS: 32.715339, -103.930783

Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 6/30/22

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

Table 1
Concentrations of BTEX, TPH, and Chloride in Soil
Chevron Environmental Management Company
Benson Shugart Waterflood Unit #015
NMOCD Ref. #: nMLB0526441458

NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**-**	**-**	**100**	**600**
NMOCD Reclamation Standard				**10**	**50**	**-**	**-**	**-**	**-**	**100**	**600**
Sample ID	**Date**	**Depth (Feet)**	**Soil Status**	**SW 846 8021B**		**SW 846 8015M Ext.**					**4500 Cl**
				Benzene (mg/kg)	**BTEX (mg/kg)**	**GRO C_6-C_{10} (mg/kg)**	**DRO C_{10}-C_{28} (mg/kg)**	**GRO + DRO C_6-C_{28} (mg/kg)**	**ORO C_{28}-C_{36} (mg/kg)**	**TPH C_6-C_{36} (mg/kg)**	**Chloride (mg/kg)**
East Auger Hole	4/6/2022	0-0.5	In-Situ	-	-	-	-	-	-	-	20.4
East Auger Hole	4/6/2022	3.5-4	In-Situ	-	-	-	-	-	-	-	99.5
North Auger Hole 1	4/6/2022	0-0.5	In-Situ	-	-	-	-	-	-	-	15.0
North Auger Hole 1	4/6/2022	3.5-4	In-Situ	-	-	-	-	-	-	-	97.8
North Auger Hole 2	4/6/2022	0-0.5	In-Situ	-	-	-	-	-	-	-	10.4
North Auger Hole 2	4/6/2022	3.5-4	In-Situ	-	-	-	-	-	-	-	314
South Auger Hole	4/6/2022	0-0.5	In-Situ	-	-	-	-	-	-	-	33.7
South Auger Hole	4/6/2022	3.5-4	In-Situ	-	-	-	-	-	-	-	8.16
South Auger Hole 1	4/6/2022	0-0.5	In-Situ	-	-	-	-	-	-	-	23.5
South Auger Hole 1	4/6/2022	3.5-4	In-Situ	-	-	-	-	-	-	-	<4.95
West Auger Hole	4/6/2022	0-0.5	In-Situ	-	-	-	-	-	-	-	16.3
West Auger Hole	4/6/2022	3.5-4	In-Situ	-	-	-	-	-	-	-	20.2
Auger Hole 1	1/5/2022	0-0.5	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	**10,000**
Auger Hole 1	1/5/2022	3.5-4	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	**2,300**
Auger Hole 1	4/11/2022	5.5-6	In-Situ	-	-	-	-	-	-	-	370
Auger Hole 2	1/5/2022	0-0.5	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	**1,290**
Auger Hole 2	1/5/2022	3.5-4	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	**1,130**
Auger Hole 2	4/11/2022	5.5-6	In-Situ	-	-	-	-	-	-	-	370
Auger Hole 3	1/5/2022	0-0.5	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	**13,600**
Auger Hole 3	1/5/2022	3.5-4	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	**1,470**
Auger Hole 3	4/11/2022	5.5-6	In-Situ	-	-	-	-	-	-	-	369
Auger Hole 4	1/5/2022	0-0.5	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	**17,100**
Auger Hole 4	1/5/2022	3.5-4	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	**889**
Auger Hole 4	4/11/2022	5.5-6	In-Situ	-	-	-	-	-	-	-	73.9

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

Appendix A

Initial Release Notification and Corrective Action Form C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

30-015-27712
nMLB052644458

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	CHESAPEAKE	Contact	BRADLEY G. BLEVINS
Address	5014 CARLSBAD HWY HOBBS	Telephone No.	505 391-1462
Facility Name	BENSON SHUGHART INJ LINE #1	Facility Type	LEASE INJECTION

Surface Owner	Mineral Owner	Lease No.
		NM 01375

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	25	18S	30E					EDDY

Latitude N 32° 42' 49" Longitude W 103° 56' 36"

NATURE OF RELEASE

Type of Release	PRODUCED WATER	Volume of Release	200 BBL
Source of Release	INJECTION LINE	Date and Hour of Occurrence	
Was Immediate Notice Given?	☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	MIKE BRATCHER
By Whom?	BRAD	Date and Hour	8/19/05 1300
Was a Watercourse Reached?	☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	
Volume Recovered	150	Date and Hour of Discovery	8/19/05 1300

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

PIPE LINE FAILURE
UTILIZED VAC TRUCKS TO REMOVE FREE PRODUCT AND START EXCAVATION

Describe Area Affected and Cleanup Action Taken.*

50 X 160 ALONG LEASE ROAD (WILL NOTIFY BEFORE SAMPLE COLLECTION FOR LAB)
REMOVE SATURATED SOIL TO LINED CONTAINMENT AND SEND TO CRI

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	Bradley Blevins	OIL CONSERVATION DIVISION	
Printed Name:	Bradley Blevins	Approved by District Supervisor:	TIM GUM by MB Mike Bratcher
Title:	Field Tech	Approval Date:	9/21/05 Expiration Date: N/A
E-mail Address:	bblevins@chkenergy.com	Conditions of Approval:	Attached ☒
Date:	8-25-05 Phone:		

* Attach Additional Sheets If Necessary

State of New Mexico
Oil Conservation Division

Incident ID	
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?	_____ (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.

State of New Mexico
Oil Conservation Division

Incident ID	
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: _Amy Barnhill_____ Title: Environmental Advisor_____

Signature:_____ Date: _8-2-22_____

email: ___ABarnhill@chevron.com_____ Telephone: __432-687-7108_____

OCD Only

Received by: Jocelyn Harimon Date: 08/02/2022

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

☐ Extents of contamination must be fully delineated.

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

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

Printed Name: _Amy Barnhill_____ Title: ___Environmental Advisor_____

Signature: _____ Date: _8-2-22_____

email: ___ABarnhill@chevron.com_____ Telephone: __432-687-7108_____

OCD Only

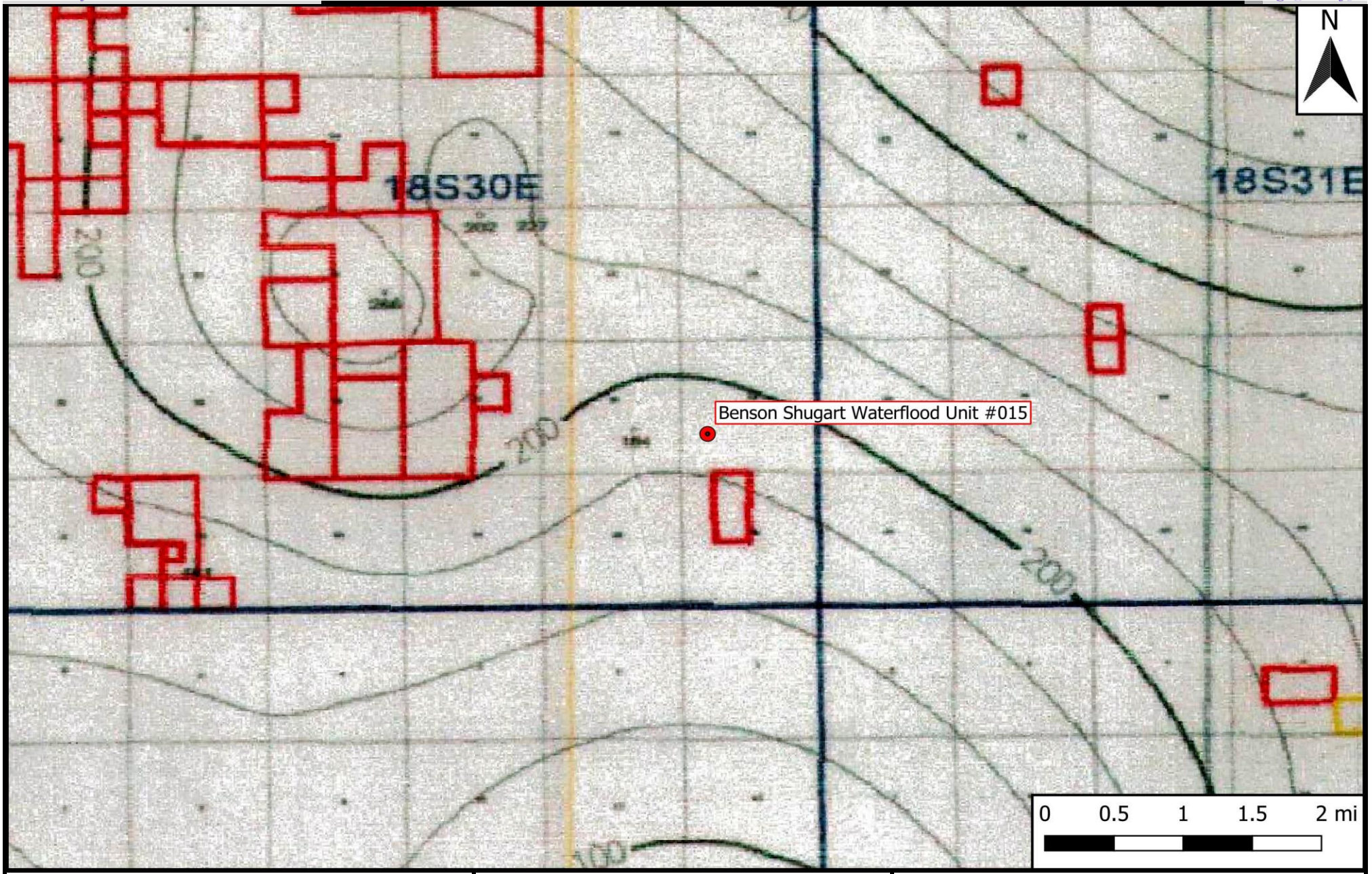
Received by: Jocelyn Harimon Date: _____

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

Signature: _____ Date: 12/8/2022

Appendix B

Groundwater Data Maps and Supporting Water Well Data



Legend

Site Location

Figure 4

Inferred Depth to Groundwater Trend Map

Chevron Environmental Management Company

Benson Shugart Waterflood Unit #015

GPS: 32.715339, -103.930783

Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 6/29/22

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

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

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

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00818 POD1		CP	LE	1	4		26	18S	30E	599289	3620364*	923	240		
CP 00767 POD1		CP	ED	3	2		35	18S	30E	599300	3619158*	1406	500		

Average Depth to Water: --
Minimum Depth: --
Maximum Depth: --

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 600203.74 **Northing (Y):** 3620235.47 **Radius:** 1610

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 00818 POD1	1	4		26	18S	30E	599289	3620364*

Driller License: 122 **Driller Company:** UNKNOWN

Driller Name:

Drill Start Date: **Drill Finish Date:** **Plug Date:**

Log File Date: **PCW Rcv Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 20 GPM

Casing Size: 7.00 **Depth Well:** 240 feet **Depth Water:**

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 00767 POD1	3	2		35	18S	30E	599300	3619158*

Driller License: **Driller Company:**

Driller Name:

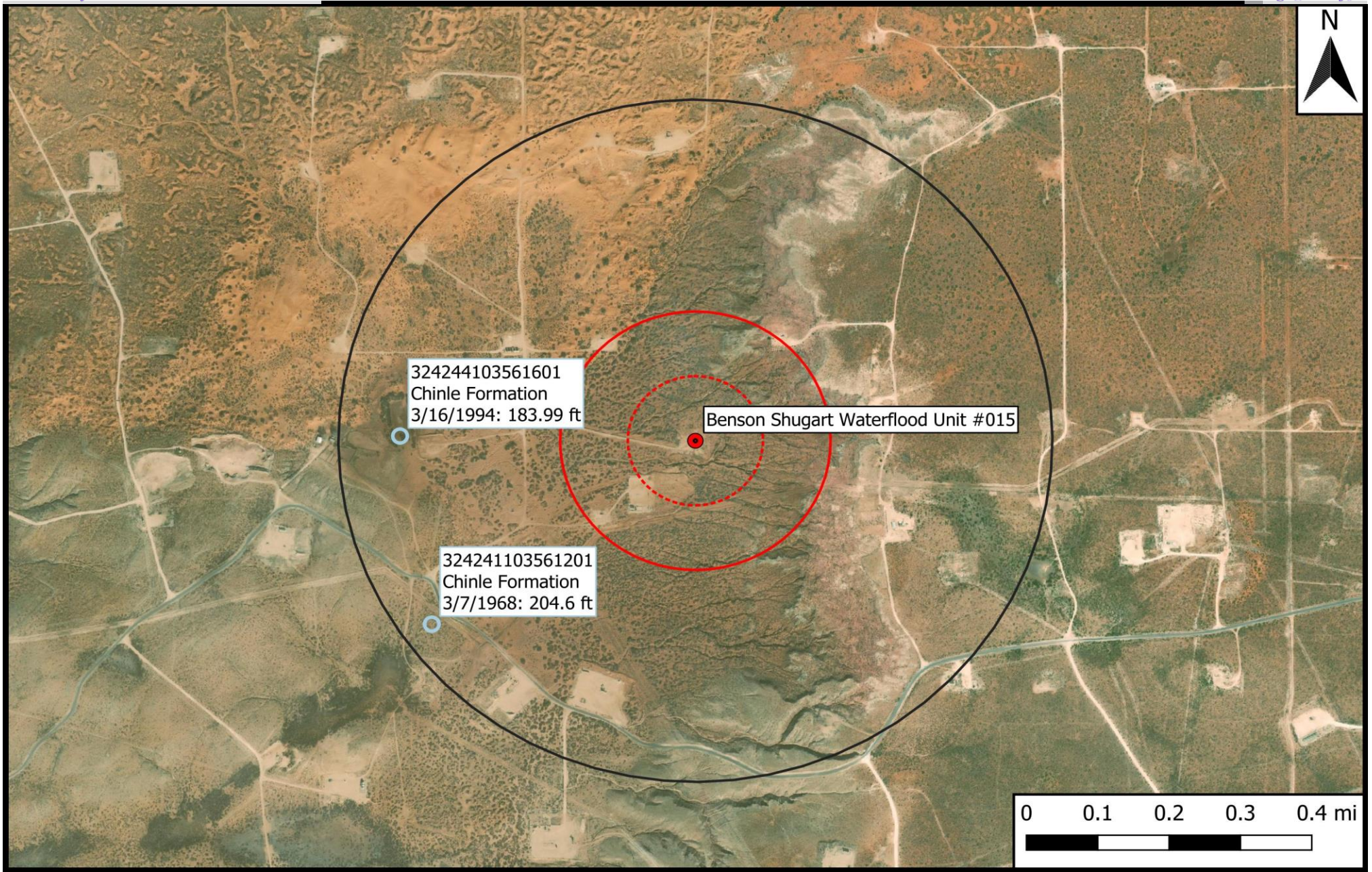
Drill Start Date: **Drill Finish Date:** **Plug Date:**

Log File Date: **PCW Rcv Date:** **Source:**

Pump Type: **Pipe Discharge Size:** **Estimated Yield:**

Casing Size: 5.50 **Depth Well:** 500 feet **Depth Water:**

***UTM location was derived from PLSS - see Help**



Legend
- Site Location
- Well - USGS
- 500 Ft Radius
- 1000 Ft Radius
- 0.5 Mi Radius

Figure 5
USGS Well Proximity Map
Chevron Environmental Management Company
Benson Shugart Waterflood Unit #015
GPS: 32.715339, -103.930783
Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 6/29/22

USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click forNews Bulletins

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 324241103561201

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

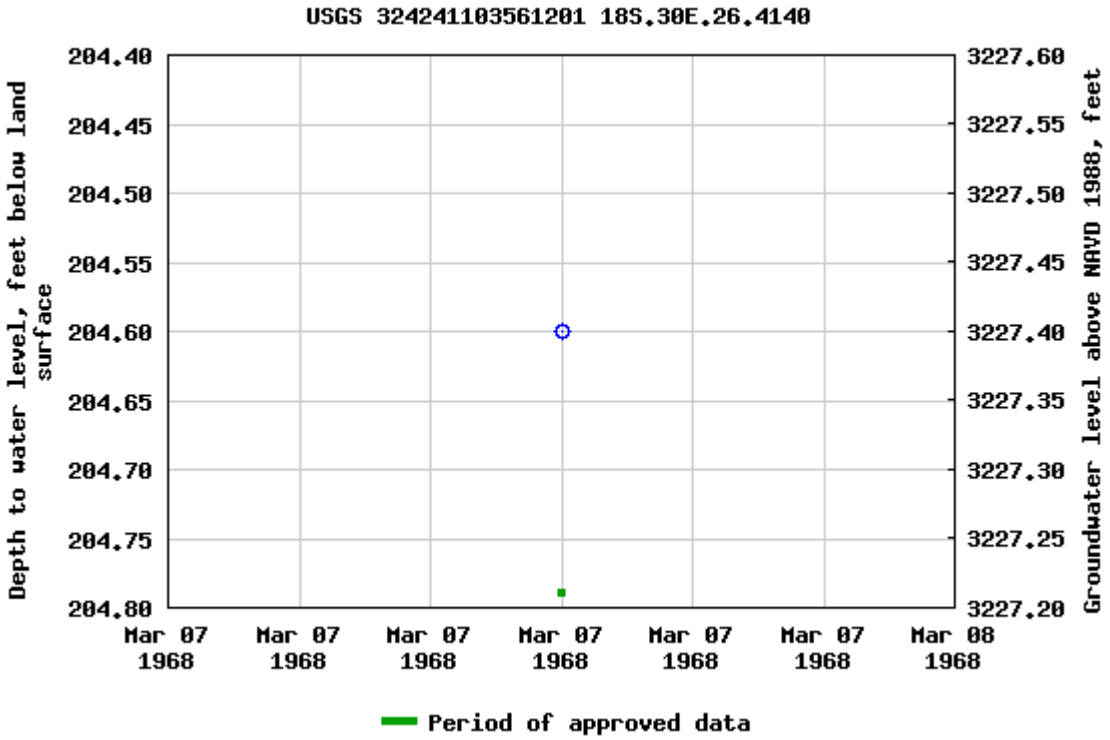
USGS 324241103561201 18S.30E.26.4140

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°42'41", Longitude 103°56'12" NAD27
Land-surface elevation 3,432 feet above NAVD88
The depth of the well is 230 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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 forNews Bulletins

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 324244103561601

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

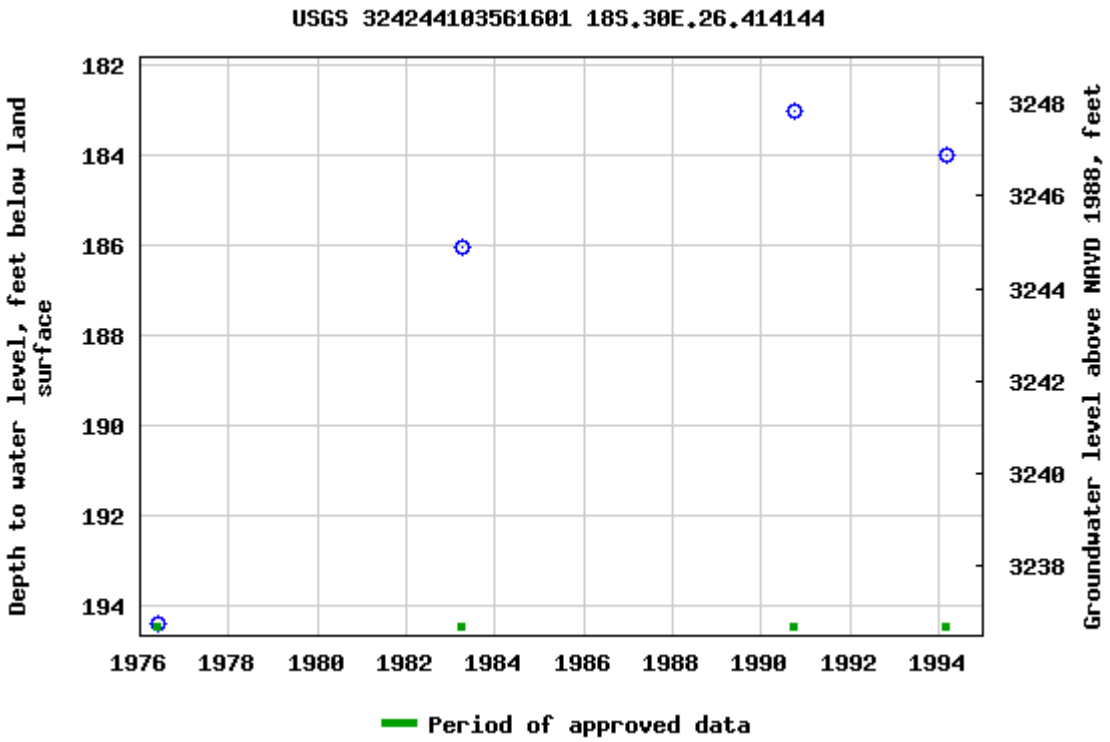
USGS 324244103561601 18S.30E.26.414144

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°42'55.8", Longitude 103°56'16.4" NAD83
Land-surface elevation 3,431 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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

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: 2022-06-29 16:30:56 EDT
0.59 0.53 nadww01

Appendix C

Photographic Documentation

Project Name: *Benson Shugart Waterflood Unit #015*
Project No: *15306*

Photographic Documentation

Photo No: **1.**	
Direction Taken: West	
Description: View during assessment and delineation event.	

Photo No: **2.**	
Direction Taken: West	
Description: View during assessment and delineation event.	

Project Name: *Benson Shugart Waterflood Unit #015*
Project No: *15306*

Photographic Documentation

Photo No: **3.**	
Direction Taken: East	
Description: View during assessment and delineation event.	

Photo No: **4.**	
Direction Taken: East	
Description: View during assessment and delineation event.	

Appendix D

Laboratory Analytical

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9972-1
Client Project/Site: Benson Shugart Waterflood Unit #015

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

Attn: Brandon Wilson

JKramer

Authorized for release by:
1/13/2022 8:36:58 PM

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

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

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

Client: Etech Environmental & Safety Solutions
Project/Site: Benson Shugart Waterflood Unit #015

Laboratory Job ID: 880-9972-1

Table of Contents

Definitions/Glossary

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Etech Environmental & Safety Solutions
Project/Site: Benson Shugart Waterflood Unit #015

Job ID: 880-9972-1

Job ID: 880-9972-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-9972-1

Receipt
The samples were received on 1/7/2022 1:05 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C

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

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

HPLC/IC
Method 300_ORGFM_28D: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with preparation batch 880-16443 and analytical batch 880-16558 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Chloride in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

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

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 1
Lab Sample ID: 880-9972-1
Date Collected: 01/05/22 11:50
Matrix: Solid
Date Received: 01/07/22 13:05
Sample Depth: 0-6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 00:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 00:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 00:36	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/07/22 14:37	01/11/22 00:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 00:36	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/07/22 14:37	01/11/22 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*01/07/22 14:37*	*01/11/22 00:36*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*01/07/22 14:37*	*01/11/22 00:36*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			01/12/22 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/12/22 14:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 19:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 19:33	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*70 - 130*	*01/07/22 15:26*	*01/08/22 19:33*	*1*
o-Terphenyl	*75*		*70 - 130*	*01/07/22 15:26*	*01/08/22 19:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10000**		49.7		mg/Kg			01/13/22 16:19	10

Client Sample ID: Auger Hole 1
Lab Sample ID: 880-9972-2
Date Collected: 01/05/22 11:52
Matrix: Solid
Date Received: 01/07/22 13:05
Sample Depth: 42-48"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/07/22 14:37	01/11/22 00:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/07/22 14:37	01/11/22 00:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/07/22 14:37	01/11/22 00:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/07/22 14:37	01/11/22 00:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/07/22 14:37	01/11/22 00:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/07/22 14:37	01/11/22 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*01/07/22 14:37*	*01/11/22 00:56*	*1*

Eurofins Midland

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 1
Lab Sample ID: 880-9972-2
Date Collected: 01/05/22 11:52
Matrix: Solid
Date Received: 01/07/22 13:05
Sample Depth: 42-48"

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*01/07/22 14:37*	*01/11/22 00:56*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/12/22 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/12/22 14:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 19:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 19:53	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*01/07/22 15:26*	*01/08/22 19:53*	*1*
o-Terphenyl	*78*		*70 - 130*	*01/07/22 15:26*	*01/08/22 19:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2300**		25.0		mg/Kg			01/13/22 13:33	5

Client Sample ID: Auger Hole 2
Lab Sample ID: 880-9972-3
Date Collected: 01/05/22 11:54
Matrix: Solid
Date Received: 01/07/22 13:05
Sample Depth: 0-6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/07/22 14:37	01/11/22 01:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/07/22 14:37	01/11/22 01:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/07/22 14:37	01/11/22 01:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/07/22 14:37	01/11/22 01:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/07/22 14:37	01/11/22 01:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/07/22 14:37	01/11/22 01:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*01/07/22 14:37*	*01/11/22 01:17*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*01/07/22 14:37*	*01/11/22 01:17*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			01/12/22 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/12/22 14:00	1

Eurofins Midland

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 2
Lab Sample ID: 880-9972-3
Date Collected: 01/05/22 11:54
Matrix: Solid
Date Received: 01/07/22 13:05
Sample Depth: 0-6"

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 20:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 20:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*01/07/22 15:26*	*01/08/22 20:13*	*1*
o-Terphenyl	*80*		*70 - 130*	*01/07/22 15:26*	*01/08/22 20:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1290**		4.95		mg/Kg			01/13/22 13:44	1

Client Sample ID: Auger Hole 2
Lab Sample ID: 880-9972-4
Date Collected: 01/05/22 11:56
Matrix: Solid
Date Received: 01/07/22 13:05
Sample Depth: 42-48"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 01:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 01:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 01:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/07/22 14:37	01/11/22 01:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 01:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/07/22 14:37	01/11/22 01:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*01/07/22 14:37*	*01/11/22 01:37*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/07/22 14:37*	*01/11/22 01:37*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			01/12/22 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/12/22 14:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 20:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 20:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*01/07/22 15:26*	*01/08/22 20:33*	*1*
o-Terphenyl	*77*		*70 - 130*	*01/07/22 15:26*	*01/08/22 20:33*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 2

Lab Sample ID: 880-9972-4
Matrix: Solid
Date Collected: 01/05/22 11:56
Date Received: 01/07/22 13:05
Sample Depth: 42-48"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1130		5.01		mg/Kg			01/13/22 14:20	1

Client Sample ID: Auger Hole 3

Lab Sample ID: 880-9972-5
Matrix: Solid
Date Collected: 01/05/22 11:58
Date Received: 01/07/22 13:05
Sample Depth: 0-6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 01:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 01:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 01:58	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/07/22 14:37	01/11/22 01:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 01:58	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/07/22 14:37	01/11/22 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*01/07/22 14:37*	*01/11/22 01:58*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/07/22 14:37*	*01/11/22 01:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/12/22 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/12/22 14:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 20:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 20:54	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*01/07/22 15:26*	*01/08/22 20:54*	*1*
o-Terphenyl	*77*		*70 - 130*	*01/07/22 15:26*	*01/08/22 20:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13600		99.8		mg/Kg			01/13/22 16:30	20

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 3

Lab Sample ID: 880-9972-6
Matrix: Solid
Date Collected: 01/05/22 12:00
Date Received: 01/07/22 13:05
Sample Depth: 42-48"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/07/22 14:37	01/11/22 02:18	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/07/22 14:37	01/11/22 02:18	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/07/22 14:37	01/11/22 02:18	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/07/22 14:37	01/11/22 02:18	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/07/22 14:37	01/11/22 02:18	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/07/22 14:37	01/11/22 02:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*01/07/22 14:37*	*01/11/22 02:18*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*01/07/22 14:37*	*01/11/22 02:18*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			01/12/22 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/12/22 14:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 21:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 21:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*01/07/22 15:26*	*01/08/22 21:14*	*1*
o-Terphenyl	*76*		*70 - 130*	*01/07/22 15:26*	*01/08/22 21:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1470**		24.8		mg/Kg			01/13/22 15:07	5

Client Sample ID: Auger Hole 4

Lab Sample ID: 880-9972-7
Matrix: Solid
Date Collected: 01/05/22 12:02
Date Received: 01/07/22 13:05
Sample Depth: 0-6"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/07/22 14:37	01/11/22 04:08	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/07/22 14:37	01/11/22 04:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/07/22 14:37	01/11/22 04:08	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/07/22 14:37	01/11/22 04:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/07/22 14:37	01/11/22 04:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/07/22 14:37	01/11/22 04:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/07/22 14:37*	*01/11/22 04:08*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 4
Lab Sample ID: 880-9972-7
Matrix: Solid
Date Collected: 01/05/22 12:02
Date Received: 01/07/22 13:05
Sample Depth: 0-6"

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*01/07/22 14:37*	*01/11/22 04:08*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			01/12/22 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/12/22 14:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 21:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 21:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*01/07/22 15:26*	*01/08/22 21:35*	*1*
o-Terphenyl	*75*		*70 - 130*	*01/07/22 15:26*	*01/08/22 21:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17100**		99.4		mg/Kg			01/13/22 16:42	20

Client Sample ID: Auger Hole 4
Lab Sample ID: 880-9972-8
Matrix: Solid
Date Collected: 01/05/22 12:04
Date Received: 01/07/22 13:05
Sample Depth: 42-48"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 04:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 04:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 04:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/07/22 14:37	01/11/22 04:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/11/22 04:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/07/22 14:37	01/11/22 04:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*165*	*S1+*	*70 - 130*	*01/07/22 14:37*	*01/11/22 04:29*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*01/07/22 14:37*	*01/11/22 04:29*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			01/12/22 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/12/22 14:00	1

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Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 4
Lab Sample ID: 880-9972-8

Date Collected: 01/05/22 12:04
Matrix: Solid
Date Received: 01/07/22 13:05
Sample Depth: 42-48"

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 21:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 21:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/07/22 15:26	01/08/22 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*01/07/22 15:26*	*01/08/22 21:55*	*1*
o-Terphenyl	*76*		*70 - 130*	*01/07/22 15:26*	*01/08/22 21:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**889**		4.98		mg/Kg			01/13/22 15:31	1

Surrogate Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-9970-A-1-A MS	Matrix Spike	103	94
880-9970-A-1-B MSD	Matrix Spike Duplicate	106	95
880-9972-1	Auger Hole 1	111	103
880-9972-2	Auger Hole 1	117	95
880-9972-3	Auger Hole 2	119	78
880-9972-4	Auger Hole 2	115	100
880-9972-5	Auger Hole 3	120	97
880-9972-6	Auger Hole 3	114	95
880-9972-7	Auger Hole 4	99	74
880-9972-8	Auger Hole 4	165 S1+	80
LCS 880-16282/1-A	Lab Control Sample	102	98
LCSD 880-16282/2-A	Lab Control Sample Dup	107	100
MB 880-16273/5-A	Method Blank	120	108
MB 880-16282/5-A	Method Blank	120	106

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-9968-A-1-C MS	Matrix Spike	76	73
880-9968-A-1-D MSD	Matrix Spike Duplicate	78	74
880-9972-1	Auger Hole 1	70	75
880-9972-2	Auger Hole 1	71	78
880-9972-3	Auger Hole 2	74	80
880-9972-4	Auger Hole 2	72	77
880-9972-5	Auger Hole 3	72	77
880-9972-6	Auger Hole 3	73	76
880-9972-7	Auger Hole 4	71	75
880-9972-8	Auger Hole 4	71	76
LCS 880-16294/2-A	Lab Control Sample	112	113
LCSD 880-16294/3-A	Lab Control Sample Dup	112	111
MB 880-16294/1-A	Method Blank	75	82

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-16273/5-A
Matrix: Solid
Analysis Batch: 16341

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16273

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:21	01/10/22 10:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:21	01/10/22 10:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:21	01/10/22 10:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/07/22 14:21	01/10/22 10:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:21	01/10/22 10:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/07/22 14:21	01/10/22 10:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*01/07/22 14:21*	*01/10/22 10:50*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*01/07/22 14:21*	*01/10/22 10:50*	*1*

Lab Sample ID: MB 880-16282/5-A
Matrix: Solid
Analysis Batch: 16341

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16282

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/10/22 22:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/10/22 22:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/10/22 22:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/07/22 14:37	01/10/22 22:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/07/22 14:37	01/10/22 22:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/07/22 14:37	01/10/22 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*01/07/22 14:37*	*01/10/22 22:45*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*01/07/22 14:37*	*01/10/22 22:45*	*1*

Lab Sample ID: LCS 880-16282/1-A
Matrix: Solid
Analysis Batch: 16341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16282

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09284		mg/Kg		93	70 - 130
Toluene	0.100	0.09530		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.09449		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1883		mg/Kg		94	70 - 130
o-Xylene	0.100	0.08928		mg/Kg		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-16282/2-A
Matrix: Solid
Analysis Batch: 16341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16282

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09551		mg/Kg		96	70 - 130	3	35

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QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: Benson Shugart Waterflood Unit #015

Job ID: 880-9972-1

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

Lab Sample ID: LCSD 880-16282/2-A
Matrix: Solid
Analysis Batch: 16341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16282

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.09452		mg/Kg		95	70 - 130	1	35
Ethylbenzene			0.100	0.09939		mg/Kg		99	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1946		mg/Kg		97	70 - 130	3	35
o-Xylene			0.100	0.09623		mg/Kg		96	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-9970-A-1-A MS
Matrix: Solid
Analysis Batch: 16341

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 16282

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.0998	0.07914		mg/Kg		79	70 - 130		
Toluene	<0.00200	U	0.0998	0.08145		mg/Kg		82	70 - 130		
Ethylbenzene	<0.00200	U	0.0998	0.08486		mg/Kg		85	70 - 130		
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1614		mg/Kg		81	70 - 130		
o-Xylene	<0.00200	U	0.0998	0.08289		mg/Kg		83	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-9970-A-1-B MSD
Matrix: Solid
Analysis Batch: 16341

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 16282

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.07850		mg/Kg		79	70 - 130	1	35
Toluene	<0.00200	U	0.100	0.08377		mg/Kg		84	70 - 130	3	35
Ethylbenzene	<0.00200	U	0.100	0.08307		mg/Kg		83	70 - 130	2	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1604		mg/Kg		80	70 - 130	1	35
o-Xylene	<0.00200	U	0.100	0.08218		mg/Kg		82	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-16294/1-A
Matrix: Solid
Analysis Batch: 16326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16294

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 13:27	1

QC Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

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

Lab Sample ID: MB 880-16294/1-A
Matrix: Solid
Analysis Batch: 16326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 16294

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 13:27	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/07/22 15:26	01/08/22 13:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*75*		*70 - 130*	*01/07/22 15:26*	*01/08/22 13:27*	*1*
o-Terphenyl	*82*		*70 - 130*	*01/07/22 15:26*	*01/08/22 13:27*	*1*

Lab Sample ID: LCS 880-16294/2-A
Matrix: Solid
Analysis Batch: 16326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 16294

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	869.2		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	908.2		mg/Kg		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: LCSD 880-16294/3-A
Matrix: Solid
Analysis Batch: 16326

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 16294

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	850.2		mg/Kg		85	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	861.0		mg/Kg		86	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: 880-9968-A-1-C MS
Matrix: Solid
Analysis Batch: 16326

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 16294

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	952.2		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	849.7		mg/Kg		81	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*76*		*70 - 130*
o-Terphenyl	*73*		*70 - 130*

QC Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

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

Lab Sample ID: 880-9968-A-1-D MSD
Client Sample ID: Matrix Spike Duplicate
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 16326
Prep Batch: 16294

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	936.4		mg/Kg		94	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	869.7		mg/Kg		83	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*74*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-16443/1-A
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 16558

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/13/22 08:45	1

Lab Sample ID: LCS 880-16443/2-A
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 16558

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	243.0		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-16443/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Solid
Prep Type: Soluble
Analysis Batch: 16558

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	246.7		mg/Kg		99	90 - 110	2	20

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Benson Shugart Waterflood Unit #015

Job ID: 880-9972-1

GC VOA

Prep Batch: 16273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-16273/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 16282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-1	Auger Hole 1	Total/NA	Solid	5035	
880-9972-2	Auger Hole 1	Total/NA	Solid	5035	
880-9972-3	Auger Hole 2	Total/NA	Solid	5035	
880-9972-4	Auger Hole 2	Total/NA	Solid	5035	
880-9972-5	Auger Hole 3	Total/NA	Solid	5035	
880-9972-6	Auger Hole 3	Total/NA	Solid	5035	
880-9972-7	Auger Hole 4	Total/NA	Solid	5035	
880-9972-8	Auger Hole 4	Total/NA	Solid	5035	
MB 880-16282/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-16282/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-16282/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9970-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-9970-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 16341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-1	Auger Hole 1	Total/NA	Solid	8021B	16282
880-9972-2	Auger Hole 1	Total/NA	Solid	8021B	16282
880-9972-3	Auger Hole 2	Total/NA	Solid	8021B	16282
880-9972-4	Auger Hole 2	Total/NA	Solid	8021B	16282
880-9972-5	Auger Hole 3	Total/NA	Solid	8021B	16282
880-9972-6	Auger Hole 3	Total/NA	Solid	8021B	16282
880-9972-7	Auger Hole 4	Total/NA	Solid	8021B	16282
880-9972-8	Auger Hole 4	Total/NA	Solid	8021B	16282
MB 880-16273/5-A	Method Blank	Total/NA	Solid	8021B	16273
MB 880-16282/5-A	Method Blank	Total/NA	Solid	8021B	16282
LCS 880-16282/1-A	Lab Control Sample	Total/NA	Solid	8021B	16282
LCSD 880-16282/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	16282
880-9970-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	16282
880-9970-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	16282

Analysis Batch: 16668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-1	Auger Hole 1	Total/NA	Solid	Total BTEX	
880-9972-2	Auger Hole 1	Total/NA	Solid	Total BTEX	
880-9972-3	Auger Hole 2	Total/NA	Solid	Total BTEX	
880-9972-4	Auger Hole 2	Total/NA	Solid	Total BTEX	
880-9972-5	Auger Hole 3	Total/NA	Solid	Total BTEX	
880-9972-6	Auger Hole 3	Total/NA	Solid	Total BTEX	
880-9972-7	Auger Hole 4	Total/NA	Solid	Total BTEX	
880-9972-8	Auger Hole 4	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 16294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-1	Auger Hole 1	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

GC Semi VOA (Continued)

Prep Batch: 16294 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-2	Auger Hole 1	Total/NA	Solid	8015NM Prep	
880-9972-3	Auger Hole 2	Total/NA	Solid	8015NM Prep	
880-9972-4	Auger Hole 2	Total/NA	Solid	8015NM Prep	
880-9972-5	Auger Hole 3	Total/NA	Solid	8015NM Prep	
880-9972-6	Auger Hole 3	Total/NA	Solid	8015NM Prep	
880-9972-7	Auger Hole 4	Total/NA	Solid	8015NM Prep	
880-9972-8	Auger Hole 4	Total/NA	Solid	8015NM Prep	
MB 880-16294/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-16294/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-16294/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9968-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9968-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 16326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-1	Auger Hole 1	Total/NA	Solid	8015B NM	16294
880-9972-2	Auger Hole 1	Total/NA	Solid	8015B NM	16294
880-9972-3	Auger Hole 2	Total/NA	Solid	8015B NM	16294
880-9972-4	Auger Hole 2	Total/NA	Solid	8015B NM	16294
880-9972-5	Auger Hole 3	Total/NA	Solid	8015B NM	16294
880-9972-6	Auger Hole 3	Total/NA	Solid	8015B NM	16294
880-9972-7	Auger Hole 4	Total/NA	Solid	8015B NM	16294
880-9972-8	Auger Hole 4	Total/NA	Solid	8015B NM	16294
MB 880-16294/1-A	Method Blank	Total/NA	Solid	8015B NM	16294
LCS 880-16294/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	16294
LCSD 880-16294/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	16294
880-9968-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	16294
880-9968-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	16294

Analysis Batch: 16554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-1	Auger Hole 1	Total/NA	Solid	8015 NM	
880-9972-2	Auger Hole 1	Total/NA	Solid	8015 NM	
880-9972-3	Auger Hole 2	Total/NA	Solid	8015 NM	
880-9972-4	Auger Hole 2	Total/NA	Solid	8015 NM	
880-9972-5	Auger Hole 3	Total/NA	Solid	8015 NM	
880-9972-6	Auger Hole 3	Total/NA	Solid	8015 NM	
880-9972-7	Auger Hole 4	Total/NA	Solid	8015 NM	
880-9972-8	Auger Hole 4	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 16443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-1	Auger Hole 1	Soluble	Solid	DI Leach	
880-9972-2	Auger Hole 1	Soluble	Solid	DI Leach	
880-9972-3	Auger Hole 2	Soluble	Solid	DI Leach	
880-9972-4	Auger Hole 2	Soluble	Solid	DI Leach	
880-9972-5	Auger Hole 3	Soluble	Solid	DI Leach	
880-9972-6	Auger Hole 3	Soluble	Solid	DI Leach	
880-9972-7	Auger Hole 4	Soluble	Solid	DI Leach	

QC Association Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

HPLC/IC (Continued)

Leach Batch: 16443 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-8	Auger Hole 4	Soluble	Solid	DI Leach	
MB 880-16443/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-16443/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-16443/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 16558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9972-1	Auger Hole 1	Soluble	Solid	300.0	16443
880-9972-2	Auger Hole 1	Soluble	Solid	300.0	16443
880-9972-3	Auger Hole 2	Soluble	Solid	300.0	16443
880-9972-4	Auger Hole 2	Soluble	Solid	300.0	16443
880-9972-5	Auger Hole 3	Soluble	Solid	300.0	16443
880-9972-6	Auger Hole 3	Soluble	Solid	300.0	16443
880-9972-7	Auger Hole 4	Soluble	Solid	300.0	16443
880-9972-8	Auger Hole 4	Soluble	Solid	300.0	16443
MB 880-16443/1-A	Method Blank	Soluble	Solid	300.0	16443
LCS 880-16443/2-A	Lab Control Sample	Soluble	Solid	300.0	16443
LCSD 880-16443/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	16443

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 1
Lab Sample ID: 880-9972-1
Date Collected: 01/05/22 11:50
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	16282	01/07/22 14:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	16341	01/11/22 00:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16668	01/12/22 13:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16554	01/12/22 14:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	16294	01/07/22 15:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			16326	01/08/22 19:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	16443	01/10/22 13:40	CH	XEN MID
Soluble	Analysis	300.0		10			16558	01/13/22 16:19	SC	XEN MID

Client Sample ID: Auger Hole 1
Lab Sample ID: 880-9972-2
Date Collected: 01/05/22 11:52
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	16282	01/07/22 14:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	16341	01/11/22 00:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16668	01/12/22 13:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16554	01/12/22 14:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	16294	01/07/22 15:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			16326	01/08/22 19:53	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	16443	01/10/22 13:40	CH	XEN MID
Soluble	Analysis	300.0		5			16558	01/13/22 13:33	SC	XEN MID

Client Sample ID: Auger Hole 2
Lab Sample ID: 880-9972-3
Date Collected: 01/05/22 11:54
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	16282	01/07/22 14:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	16341	01/11/22 01:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16668	01/12/22 13:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16554	01/12/22 14:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	16294	01/07/22 15:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			16326	01/08/22 20:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	16443	01/10/22 13:40	CH	XEN MID
Soluble	Analysis	300.0		1			16558	01/13/22 13:44	SC	XEN MID

Client Sample ID: Auger Hole 2
Lab Sample ID: 880-9972-4
Date Collected: 01/05/22 11:56
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	16282	01/07/22 14:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	16341	01/11/22 01:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16668	01/12/22 13:10	AJ	XEN MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 2
Lab Sample ID: 880-9972-4
Date Collected: 01/05/22 11:56
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			16554	01/12/22 14:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	16294	01/07/22 15:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			16326	01/08/22 20:33	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	16443	01/10/22 13:40	CH	XEN MID
Soluble	Analysis	300.0		1			16558	01/13/22 14:20	SC	XEN MID

Client Sample ID: Auger Hole 3
Lab Sample ID: 880-9972-5
Date Collected: 01/05/22 11:58
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	16282	01/07/22 14:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	16341	01/11/22 01:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16668	01/12/22 13:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16554	01/12/22 14:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	16294	01/07/22 15:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			16326	01/08/22 20:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	16443	01/10/22 13:40	CH	XEN MID
Soluble	Analysis	300.0		20			16558	01/13/22 16:30	SC	XEN MID

Client Sample ID: Auger Hole 3
Lab Sample ID: 880-9972-6
Date Collected: 01/05/22 12:00
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	16282	01/07/22 14:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	16341	01/11/22 02:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16668	01/12/22 13:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16554	01/12/22 14:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	16294	01/07/22 15:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			16326	01/08/22 21:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	16443	01/10/22 13:40	CH	XEN MID
Soluble	Analysis	300.0		5			16558	01/13/22 15:07	SC	XEN MID

Client Sample ID: Auger Hole 4
Lab Sample ID: 880-9972-7
Date Collected: 01/05/22 12:02
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	16282	01/07/22 14:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	16341	01/11/22 04:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16668	01/12/22 13:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16554	01/12/22 14:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	16294	01/07/22 15:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			16326	01/08/22 21:35	AJ	XEN MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 4
Lab Sample ID: 880-9972-7
Date Collected: 01/05/22 12:02
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	16443	01/10/22 13:40	CH	XEN MID
Soluble	Analysis	300.0		20			16558	01/13/22 16:42	SC	XEN MID

Client Sample ID: Auger Hole 4
Lab Sample ID: 880-9972-8
Date Collected: 01/05/22 12:04
Matrix: Solid
Date Received: 01/07/22 13:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	16282	01/07/22 14:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	16341	01/11/22 04:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			16668	01/12/22 13:10	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			16554	01/12/22 14:00	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	16294	01/07/22 15:26	DM	XEN MID
Total/NA	Analysis	8015B NM		1			16326	01/08/22 21:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	16443	01/10/22 13:40	CH	XEN MID
Soluble	Analysis	300.0		1			16558	01/13/22 15:31	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Laboratory: Eurofins Midland

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Benson Shugart Waterflood Unit #015

Job ID: 880-9972-1

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-9972-1
Project/Site: Benson Shugart Waterflood Unit #015

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-9972-1	Auger Hole 1	Solid	01/05/22 11:50	01/07/22 13:05	0-6"
880-9972-2	Auger Hole 1	Solid	01/05/22 11:52	01/07/22 13:05	42-48"
880-9972-3	Auger Hole 2	Solid	01/05/22 11:54	01/07/22 13:05	0-6"
880-9972-4	Auger Hole 2	Solid	01/05/22 11:56	01/07/22 13:05	42-48"
880-9972-5	Auger Hole 3	Solid	01/05/22 11:58	01/07/22 13:05	0-6"
880-9972-6	Auger Hole 3	Solid	01/05/22 12:00	01/07/22 13:05	42-48"
880-9972-7	Auger Hole 4	Solid	01/05/22 12:02	01/07/22 13:05	0-6"
880-9972-8	Auger Hole 4	Solid	01/05/22 12:04	01/07/22 13:05	42-48"

Chain of Custody

XENCO LABORATORIES

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

Work Order No: 9972

www xenco com Page 1 of 1

1/13/2022

Project Manager	Brandon Wilson	Bill to (if different)	
Company Name	Etech Environmental	Company Name	
Address	13000 W CR 100	Address	
City, State ZIP	Odessa, Tx. 79765	City, State ZIP	
Phone	432-563-2200	Email	brandon@etechenv com, blake@etechenv com

Work Order Comments

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

Project Name	Benson Shugart Waterflood Unit #015	Turn Around	
Project Number	15306	Routine	☒
P O Number	15306	Rush	
Sampler's Name	Blake Estep	Due Date	

SAMPLE RECEIPT				
Temp Blank.	Yes (No)	Wet Ice	(Yes) No	
Temperature (°C)	53/54	Thermometer ID		
Received Intact.	(Yes) No		IR8	
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.10	
Sample Custody Seals	Yes No (N/A)	Total Containers		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH 8015M	BETEX 8021B	Chlorides
Auger Hole 1	S	1/5/2022	11 50	0-6"	1	X	X	X
Auger Hole 1	S	1/5/2022	11 52	42-48"	1	X	X	X
Auger Hole 2	S	1/5/2022	11 54	0-6"	1	X	X	X
Auger Hole 2	S	1/5/2022	11 56	42-48"	1	X	X	X
Auger Hole 3	S	1/5/2022	11 58	0-6"	1	X	X	X
Auger Hole 3	S	1/5/2022	12 00	42-48"	1	X	X	X
Auger Hole 4	S	1/5/2022	12 02	0-6"	1	X	X	X
Auger Hole 4	S	1/5/2022	12 04	42-48"	1	X	X	X

Work Order Notes

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

Sample Comments

880-9972 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		1-7-22 1305	2		
3			4		
5			6		

Revised Date 051418 Rev 2018 1

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-9972-1

Login Number: 9972
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-13750-1
Client Project/Site: Benson Shugart Waterflood Unit #015

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

Attn: Brandon Wilson

JKramer

Authorized for release by:
4/20/2022 7:34:13 PM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

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

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

Client: Etech Environmental & Safety Solutions
Project/Site: Benson Shugart Waterflood Unit #015

Laboratory Job ID: 880-13750-1

Table of Contents

Definitions/Glossary

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Qualifiers

HPLC/IC

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

Glossary

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

Case Narrative

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Job ID: 880-13750-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-13750-1

Receipt
The samples were received on 4/14/2022 4:29 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.2°C

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

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: East Auger Hole
Lab Sample ID: 880-13750-1
Date Collected: 04/06/22 10:30
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 0-6"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.4		4.97		mg/Kg			04/19/22 15:01	1

Client Sample ID: East Auger Hole
Lab Sample ID: 880-13750-2
Date Collected: 04/06/22 10:32
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 42-48"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.5		5.00		mg/Kg			04/19/22 15:07	1

Client Sample ID: North Auger Hole 1
Lab Sample ID: 880-13750-3
Date Collected: 04/06/22 10:34
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 0-6"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.0		4.99		mg/Kg			04/19/22 15:27	1

Client Sample ID: North Auger Hole 1
Lab Sample ID: 880-13750-4
Date Collected: 04/06/22 10:36
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 42-48"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.8		4.96		mg/Kg			04/19/22 15:33	1

Client Sample ID: North Auger Hole 2
Lab Sample ID: 880-13750-5
Date Collected: 04/06/22 10:38
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 0-6"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.4		5.02		mg/Kg			04/19/22 15:52	1

Client Sample ID: North Auger Hole 2
Lab Sample ID: 880-13750-6
Date Collected: 04/06/22 10:40
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 42-48"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	314		5.04		mg/Kg			04/19/22 15:58	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: West Auger Hole
Lab Sample ID: 880-13750-7
Date Collected: 04/06/22 10:42
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 0-6"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.3		4.97		mg/Kg			04/19/22 16:05	1

Client Sample ID: West Auger Hole
Lab Sample ID: 880-13750-8
Date Collected: 04/06/22 10:44
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 42-48"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.2		4.97		mg/Kg			04/19/22 16:11	1

Client Sample ID: South Auger Hole 1
Lab Sample ID: 880-13750-9
Date Collected: 04/06/22 10:46
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 0-6"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			04/19/22 16:17	1

Client Sample ID: South Auger Hole 1
Lab Sample ID: 880-13750-10
Date Collected: 04/06/22 10:48
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 42-48"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.5		4.99		mg/Kg			04/19/22 16:24	1

Client Sample ID: South Auger Hole
Lab Sample ID: 880-13750-11
Date Collected: 04/06/22 10:50
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 0-6"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.7		5.03		mg/Kg			04/19/22 16:30	1

Client Sample ID: South Auger Hole
Lab Sample ID: 880-13750-12
Date Collected: 04/06/22 10:52
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 66-72"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.16		4.99		mg/Kg			04/18/22 13:01	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 1
Lab Sample ID: 880-13750-13
Date Collected: 04/11/22 10:00
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 66-72"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	370		5.02		mg/Kg			04/18/22 13:09	1

Client Sample ID: Auger Hole 2
Lab Sample ID: 880-13750-14
Date Collected: 04/11/22 10:02
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 66-72"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	370		4.99		mg/Kg			04/18/22 13:18	1

Client Sample ID: Auger Hole 3
Lab Sample ID: 880-13750-15
Date Collected: 04/11/22 10:04
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 66-72"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	369		4.95		mg/Kg			04/18/22 13:27	1

Client Sample ID: Auger Hole 4
Lab Sample ID: 880-13750-16
Date Collected: 04/11/22 10:06
Matrix: Solid
Date Received: 04/14/22 16:29
Sample Depth: 66-72"

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.9		5.03		mg/Kg			04/18/22 13:36	1

QC Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23649/1-A
Matrix: Solid
Analysis Batch: 23722

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/18/22 08:55	1

Lab Sample ID: LCS 880-23649/2-A
Matrix: Solid
Analysis Batch: 23722

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	261.6		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-23649/3-A
Matrix: Solid
Analysis Batch: 23722

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	242.7		mg/Kg		97	90 - 110	7	20

Lab Sample ID: 880-13752-A-1-B MS
Matrix: Solid
Analysis Batch: 23722

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	<5.03	U	252	258.7		mg/Kg		101	90 - 110

Lab Sample ID: 880-13752-A-1-C MSD
Matrix: Solid
Analysis Batch: 23722

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<5.03	U	252	258.5		mg/Kg		101	90 - 110	0	20

Lab Sample ID: MB 880-23643/1-A
Matrix: Solid
Analysis Batch: 23776

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/19/22 13:20	1

Lab Sample ID: LCS 880-23643/2-A
Matrix: Solid
Analysis Batch: 23776

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	228.6		mg/Kg		91	90 - 110

Lab Sample ID: LCSD 880-23643/3-A
Matrix: Solid
Analysis Batch: 23776

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	233.3		mg/Kg		93	90 - 110	2	20

QC Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-13750-2 MS
Matrix: Solid
Analysis Batch: 23776

Client Sample ID: East Auger Hole
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	99.5		250	350.4		mg/Kg		100	90 - 110		

Lab Sample ID: 880-13750-2 MSD
Matrix: Solid
Analysis Batch: 23776

Client Sample ID: East Auger Hole
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	99.5		250	332.0		mg/Kg		93	90 - 110	5	20

QC Association Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

HPLC/IC

Leach Batch: 23643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13750-1	East Auger Hole	Soluble	Solid	DI Leach	
880-13750-2	East Auger Hole	Soluble	Solid	DI Leach	
880-13750-3	North Auger Hole 1	Soluble	Solid	DI Leach	
880-13750-4	North Auger Hole 1	Soluble	Solid	DI Leach	
880-13750-5	North Auger Hole 2	Soluble	Solid	DI Leach	
880-13750-6	North Auger Hole 2	Soluble	Solid	DI Leach	
880-13750-7	West Auger Hole	Soluble	Solid	DI Leach	
880-13750-8	West Auger Hole	Soluble	Solid	DI Leach	
880-13750-9	South Auger Hole 1	Soluble	Solid	DI Leach	
880-13750-10	South Auger Hole 1	Soluble	Solid	DI Leach	
880-13750-11	South Auger Hole	Soluble	Solid	DI Leach	
MB 880-23643/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23643/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23643/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-13750-2 MS	East Auger Hole	Soluble	Solid	DI Leach	
880-13750-2 MSD	East Auger Hole	Soluble	Solid	DI Leach	

Leach Batch: 23649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13750-12	South Auger Hole	Soluble	Solid	DI Leach	
880-13750-13	Auger Hole 1	Soluble	Solid	DI Leach	
880-13750-14	Auger Hole 2	Soluble	Solid	DI Leach	
880-13750-15	Auger Hole 3	Soluble	Solid	DI Leach	
880-13750-16	Auger Hole 4	Soluble	Solid	DI Leach	
MB 880-23649/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23649/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23649/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-13752-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-13752-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 23722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13750-12	South Auger Hole	Soluble	Solid	300.0	23649
880-13750-13	Auger Hole 1	Soluble	Solid	300.0	23649
880-13750-14	Auger Hole 2	Soluble	Solid	300.0	23649
880-13750-15	Auger Hole 3	Soluble	Solid	300.0	23649
880-13750-16	Auger Hole 4	Soluble	Solid	300.0	23649
MB 880-23649/1-A	Method Blank	Soluble	Solid	300.0	23649
LCS 880-23649/2-A	Lab Control Sample	Soluble	Solid	300.0	23649
LCSD 880-23649/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23649
880-13752-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	23649
880-13752-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	23649

Analysis Batch: 23776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13750-1	East Auger Hole	Soluble	Solid	300.0	23643
880-13750-2	East Auger Hole	Soluble	Solid	300.0	23643
880-13750-3	North Auger Hole 1	Soluble	Solid	300.0	23643
880-13750-4	North Auger Hole 1	Soluble	Solid	300.0	23643
880-13750-5	North Auger Hole 2	Soluble	Solid	300.0	23643
880-13750-6	North Auger Hole 2	Soluble	Solid	300.0	23643

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Benson Shugart Waterflood Unit #015

Job ID: 880-13750-1

HPLC/IC (Continued)

Analysis Batch: 23776 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13750-7	West Auger Hole	Soluble	Solid	300.0	23643
880-13750-8	West Auger Hole	Soluble	Solid	300.0	23643
880-13750-9	South Auger Hole 1	Soluble	Solid	300.0	23643
880-13750-10	South Auger Hole 1	Soluble	Solid	300.0	23643
880-13750-11	South Auger Hole	Soluble	Solid	300.0	23643
MB 880-23643/1-A	Method Blank	Soluble	Solid	300.0	23643
LCS 880-23643/2-A	Lab Control Sample	Soluble	Solid	300.0	23643
LCSD 880-23643/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23643
880-13750-2 MS	East Auger Hole	Soluble	Solid	300.0	23643
880-13750-2 MSD	East Auger Hole	Soluble	Solid	300.0	23643

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: East Auger Hole
Lab Sample ID: 880-13750-1
Date Collected: 04/06/22 10:30
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 15:01	SC	XEN MID

Client Sample ID: East Auger Hole
Lab Sample ID: 880-13750-2
Date Collected: 04/06/22 10:32
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 15:07	SC	XEN MID

Client Sample ID: North Auger Hole 1
Lab Sample ID: 880-13750-3
Date Collected: 04/06/22 10:34
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 15:27	SC	XEN MID

Client Sample ID: North Auger Hole 1
Lab Sample ID: 880-13750-4
Date Collected: 04/06/22 10:36
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 15:33	SC	XEN MID

Client Sample ID: North Auger Hole 2
Lab Sample ID: 880-13750-5
Date Collected: 04/06/22 10:38
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 15:52	SC	XEN MID

Client Sample ID: North Auger Hole 2
Lab Sample ID: 880-13750-6
Date Collected: 04/06/22 10:40
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 15:58	SC	XEN MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: West Auger Hole
Lab Sample ID: 880-13750-7
Date Collected: 04/06/22 10:42
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 16:05	SC	XEN MID

Client Sample ID: West Auger Hole
Lab Sample ID: 880-13750-8
Date Collected: 04/06/22 10:44
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 16:11	SC	XEN MID

Client Sample ID: South Auger Hole 1
Lab Sample ID: 880-13750-9
Date Collected: 04/06/22 10:46
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 16:17	SC	XEN MID

Client Sample ID: South Auger Hole 1
Lab Sample ID: 880-13750-10
Date Collected: 04/06/22 10:48
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 16:24	SC	XEN MID

Client Sample ID: South Auger Hole
Lab Sample ID: 880-13750-11
Date Collected: 04/06/22 10:50
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	23643	04/15/22 11:50	SC	XEN MID
Soluble	Analysis	300.0		1			23776	04/19/22 16:30	SC	XEN MID

Client Sample ID: South Auger Hole
Lab Sample ID: 880-13750-12
Date Collected: 04/06/22 10:52
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	23649	04/15/22 12:06	SC	XEN MID
Soluble	Analysis	300.0		1			23722	04/18/22 13:01	CH	XEN MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Client Sample ID: Auger Hole 1
Lab Sample ID: 880-13750-13
Date Collected: 04/11/22 10:00
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	23649	04/15/22 12:06	SC	XEN MID
Soluble	Analysis	300.0		1			23722	04/18/22 13:09	CH	XEN MID

Client Sample ID: Auger Hole 2
Lab Sample ID: 880-13750-14
Date Collected: 04/11/22 10:02
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	23649	04/15/22 12:06	SC	XEN MID
Soluble	Analysis	300.0		1			23722	04/18/22 13:18	CH	XEN MID

Client Sample ID: Auger Hole 3
Lab Sample ID: 880-13750-15
Date Collected: 04/11/22 10:04
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	23649	04/15/22 12:06	SC	XEN MID
Soluble	Analysis	300.0		1			23722	04/18/22 13:27	CH	XEN MID

Client Sample ID: Auger Hole 4
Lab Sample ID: 880-13750-16
Date Collected: 04/11/22 10:06
Matrix: Solid
Date Received: 04/14/22 16:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	23649	04/15/22 12:06	SC	XEN MID
Soluble	Analysis	300.0		1			23722	04/18/22 13:36	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

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

Method Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-13750-1
Project/Site: Benson Shugart Waterflood Unit #015

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

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

Laboratory References:

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

Sample Summary

Client: Etech Environmental & Safety Solutions
Project/Site: Benson Shugart Waterflood Unit #015

Job ID: 880-13750-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-13750-1	East Auger Hole	Solid	04/06/22 10:30	04/14/22 16:29	0-6"
880-13750-2	East Auger Hole	Solid	04/06/22 10:32	04/14/22 16:29	42-48"
880-13750-3	North Auger Hole 1	Solid	04/06/22 10:34	04/14/22 16:29	0-6"
880-13750-4	North Auger Hole 1	Solid	04/06/22 10:36	04/14/22 16:29	42-48"
880-13750-5	North Auger Hole 2	Solid	04/06/22 10:38	04/14/22 16:29	0-6"
880-13750-6	North Auger Hole 2	Solid	04/06/22 10:40	04/14/22 16:29	42-48"
880-13750-7	West Auger Hole	Solid	04/06/22 10:42	04/14/22 16:29	0-6"
880-13750-8	West Auger Hole	Solid	04/06/22 10:44	04/14/22 16:29	42-48"
880-13750-9	South Auger Hole 1	Solid	04/06/22 10:46	04/14/22 16:29	0-6"
880-13750-10	South Auger Hole 1	Solid	04/06/22 10:48	04/14/22 16:29	42-48"
880-13750-11	South Auger Hole	Solid	04/06/22 10:50	04/14/22 16:29	0-6"
880-13750-12	South Auger Hole	Solid	04/06/22 10:52	04/14/22 16:29	66-72"
880-13750-13	Auger Hole 1	Solid	04/11/22 10:00	04/14/22 16:29	66-72"
880-13750-14	Auger Hole 2	Solid	04/11/22 10:02	04/14/22 16:29	66-72"
880-13750-15	Auger Hole 3	Solid	04/11/22 10:04	04/14/22 16:29	66-72"
880-13750-16	Auger Hole 4	Solid	04/11/22 10:06	04/14/22 16:29	66-72"

Chain of Custody

XENCO LABORATORIES

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

Work Order No: 13750

www xenco com Page 1 of 2

4/20/2022

Project Manager	Brandon Wilson	Bill to (if different)	
Company Name	Etech Environmental	Company Name	
Address	13000 W CR 100	Address	
City, State ZIP	Odessa, Texas 79765	City, State ZIP	
Phone	432-563-2200	Email	brandon@etechenv com, blake@etechenv com

Work Order Comments

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

Project Name	Benson Shugart Waterflood Unit #015	Turn Around	
Project Number	15306	Routine ☐	
P O Number	15306	Rush	
Sampler's Name	Blake Estep	Due Date	

SAMPLE RECEIPT			
Temp Blank	Yes (No)	Wet Ice	(Yes) No
Temperature (°C)	3.6.2	Thermometer ID	IR8
Received Intact:	(Yes) No		
Cooler Custody Seals.	Yes No (N/A)	Correction Factor	-.1
Sample Custody Seals	Yes No (N/A)	Total Containers	

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides
East Auger Hole	S	4/6/2022	10 30	0-6"	1	X
East Auger Hole	S	4/6/2022	10 32	42-48"	1	X
North Auger Hole 1	S	4/6/2022	10 34	0-6"	1	X
North Auger Hole 1	S	4/6/2022	10 36	42-48"	1	X
North Auger Hole 2	S	4/6/2022	10 38	0-6"	1	X
North Auger Hole 2	S	4/6/2022	10 40	42-48"	1	X
West Auger Hole	S	4/6/2022	10 42	0-6"	1	X
West Auger Hole	S	4/6/2022	10 44	42-48"	1	X
South Auger Hole 1	S	4/6/2022	10 46	0-6"	1	X
South Auger Hole 1	S	4/6/2022	10 48	42-48"	1	X

880-13750 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

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

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		4/14/22 16:29	2		
3			4		
5			6		

Revised Date 051418 Rev 2018.1

XENCO LABORATORIES

Chain of Custody

Work Order No: 13750

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
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www xenco com Page 2 of 2

4/20/2022

Project Manager	Brandon Wilson	Bill to (if different)	
Company Name	Etech Environmental	Company Name	
Address	13000 W CR 100	Address	
City, State ZIP	Odessa, Texas 79765	City, State ZIP	
Phone	432-563-2200	Email	brandon@etechenv com, blake@etechenv com

Work Order Comments

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

Project Name	Benson Shugart Waterflood Unit #015	Turn Around	
Project Number	15306	Routine ☐	
P O Number	15306	Rush	
Sampler's Name	Blake Estep	Due Date	

SAMPLE RECEIPT			
Temp Blank	Yes (No)	Wet Ice	(Yes) No
Temperature (°C)	3.2	Thermometer ID	IR8
Received Intact:	(Yes) No		
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.1
Sample Custody Seals	Yes No (N/A)	Total Containers	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides
South Auger Hole 2	S	4/6/2022	10 50	0-6"	1	X
South Auger Hole 2	S	4/6/2022	10 52	42-48"	1	X
Auger Hole 1	S	4/11/2022	10 00	66-72"	1	X
Auger Hole 2	S	4/11/2022	10 02	66-72"	1	X
Auger Hole 3	S	4/11/2022	10 04	66-72"	1	X
Auger Hole 4	S	4/11/2022	10 06	66-72"	1	X

ANALYSIS REQUEST

Work Order Notes

TAT starts the day received by the lab if received by 4 30pm

Sample Comments

Loc: 880
13750

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

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

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		4/14/22 16:29	2		
3			4		
5			6		

Revised Date 051418 Rev 2018.1

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-13750-1

Login Number: 13750

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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

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 130579

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 130579
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation and closure of the site must also comply with 19.15.29.13 NMAC.	12/8/2022
bhall	Please submit a complete report through the OCD Permitting website by 03/10/2023.	12/8/2022

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
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District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
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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 243907

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 243907
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Closure approved. Site will need to meet all the requirements of 19.15.29.13 NMAC.	7/25/2023