Environmental & Safety Solutions, Inc.

REMEDIATION WORK PLAN

Hayhurst NM Section 35 CTB

Eddy County, New Mexico

Incident Number nAPP2302742810

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 Remediation Work Plan (RWP) detailing completed corrective actions associated with an inadvertent release of crude oil at the Hayhurst NM section 35 CTB (Site). Chevron proposes this RWP, which summarizes current corrective response efforts and details remediation objectives to rectify remaining environmental impacts.

SITE LOCATION AND RELEASE BACKGROUND

The Site is located in Unit A, Section 35, Township 25 South, Range 27 East, in Eddy County, New Mexico (32.0916°, -104.1523°) 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 January 12, 2023, a Lease Automatic Custody Transfer (LACT) unit failure resulted in approximately 6.217 barrels (bbls) of crude oil to overflow onto the LACT unit skid and the adjacent production pad surface. Vacuum trucks were immediately dispatched and recovered approximately 4.5 bbls of free-standing fluids. Chevron immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on January 27, 2023, and was subsequently assigned Incident Number nAPP2302742810. **Figure 2** in **Appendix A** depicts the observed release area, hereafter referred to as the Area of Concern (AOC).

SITE CHARACTERIZATION AND CLOSURE CRITERIA

Etech characterized the Site 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 available groundwater data is the New Mexico Office of State Engineer (NMOSE) well C-04371, located approximately ½-mile northwest of the Site. The well has a reported groundwater depth of 69 feet below ground surface (bgs) from 2019. Based on this measurement and findings from a regional groundwater data review, depth to groundwater at the Site is estimated to be between 51 and 100 feet bgs. The referenced well record is provided in **Appendix C.**

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 and sources used for the site characterization are included **in Figure 1B** and **Figure 1C** in **Appendix A**.

Based on the results from the desktop review, specifically the BLM CFO karst designation, 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

†*The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.*

SITE ASSEMENT ASSESSMENT ACTIVITIES

On February 10, 2023, Etech personnel conducted site assessment to characterize the subject release by verifying the presence or absence of residual soil impacts within the AOC based on information provided on the Form C-141 and visual observation. Two discrete preliminary assessment soil samples (Sample Point 1 and Sample Point 2) were collected within the AOC at surface level. The locations of the preliminary soil samples are shown in **Figure 2** in **Appendix A**. Photographic documentation of site assessment activities is included in **Appendix D**.

The preliminary assessment soil 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.

Laboratory analytical results indicated elevated TPH concentrations for both preliminary assessment soil samples. As such, further remedial action appeared warranted.

EXCAVATION AND SOIL SAMPLING ACTIVITIES

On August 11, 2023, excavation activities were performed via hand shoveling to remove residual impacts identified by laboratory analytical results, verified information provided on the Form C-141 and visual observations. Excavation activities were driven by field screening soil samples for VOCs and chloride, as previously described.

Following the removal of residual soil impacts, Etech collected 5-point composite confirmation excavation soil samples at a sampling frequency of 200 square feet from the floor (labeled as Bottom Hole) and sidewalls (labeled as North Wall, South Wall, East Wall and West Wall) of the excavation. The 5-point composite samples were comprised of five equivalent aliquots homogenized in a 1-gallon, resealable plastic bag. The soil samples were then handled and analyzed as previously described by Eurofins Environment Testing (Eurofins) in Midland, Texas. Laboratory analytical results indicated one or more elevated COC concentrations present in most excavation sidewalls and throughout the excavation floor.

On March 22, 2024, Etech resumed excavation activities to remove the residual impacts identified by laboratory analytical results. Excavation activities were driven by field screening soil samples for VOCs and chloride, as previously described by PBELAB in Midland, Texas. Following additional soil removal, composite confirmation excavation soil samples were collected from the new excavation floors and sidewalls (as denoted with a suffix of “A”) handled and analyzed as previously described. The locations of the final confirmation excavation soil samples are shown in **Figure 2** in **Appendix A**.

Following remediation activities, impacted soil removed from the Site was transported to a licensed and approved New Mexico landfill under Chevron approved waste manifests.

EXCAVATION SOIL SAMPLE LABORATORY ANALYTICAL RESULTS

Laboratory analytical results indicated that concentrations of COCs for all final confirmation excavation soil samples were below the applicable Site Closure Criteria, except soil sample BH13A. Laboratory analytical results for BH13A indicated chloride concentrations exceeded the applicable Site Closure Criteria within the top 1-foot bgs. 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**.

PROPOSED REMEDIATION WORKPLAN AND SCHEDULE

Based on the excavation soil sampling results, the following conclusions regarding the release are presented:

- Laboratory analytical results indicate residual chloride impacts remain within the vicinity of soil sampling location BH13A at 0.75 feet bgs, characterized by the concentration of 4,340 mg/kg. Impacts identified at the BH13A soil sampling location appears to be horizontally delineated by the surrounding confirmation excavation sidewall soil samples and adjacent confirmation excavation floor soil samples.
- Laboratory analytical results for concentrations of COCs for the remaining final confirmation excavation soil samples are below the applicable Site Closure Criteria.

Based on the conclusions drawn above, Chevron proposes the following remedial corrective actions:

- Based on laboratory analytical results, residual impacted soil will be excavated until concentrations of COCs are in accordance with the Site Closure Criteria or the Maximum Extent Practical (MEP). Although Chevron does not anticipate complications for the continuance of excavation activities in proximity to BH13A to Site Closure Criteria, the possibility of additional subsurface and/or surface utilities within the excavation area may restrict the excavation laterally and/or vertically. As such, residual soil impacts will be excavated to the MEP, leaving residual impacted soil in place directly beneath or adjacent to utilities on the production pad.
    - Chevron and/or a third-party operator may implement additional safety precautions above encroachment guidelines at their company's discretion for the health and safety of on-site personnel and for the structural integrity of utilities.
- Following the removal of residual impacts or excavation to the MEP, 5-point confirmation excavation soil samples will be collected from the excavation, handled, and analyzed as previously described. The excavation will then be backfilled with clean, locally sourced soil and restored to "as close to its original state" as possible.
- Upon receipt and review of confirmation excavation soil sample results, Chevron will determine the appropriate measure of corrective actions that will include one of the following:
    - Documenting the removal of impacted soil at the Site with a subsequent Closure Report detailing assessment and sampling activities, including, but not limited to backfilling the excavation with clean, locally sourced soil and restored to "as close to its original state as possible."

      - or -

- Documenting and estimating the amount of residual impacted soil to be left in place at the Site with a subsequent Deferral Request Report detailing remediation efforts and soil sampling activities.

If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (432) 305-6413 or joseph@etechenv.com or Erick Herrera at (432) 305-6413 or erick@etechenv.com. **Appendix G** provides correspondence and notification receipts associated with the subject release.

Sincerely,

eTECH Environmental and Safety Solutions, Inc.

Erick Herrera
Staff Geologist

Joseph S. Hernandez
Senior Managing Geologist

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

Appendices:

Appendix A: Figure 1: Site Map
Figure 1A: Site Characterization Map – Groundwater
Figure 1B: Site Characterization Map – Surficial Receptors
Figure 1C: Site Characterization Map – Subsurface Receptors
Figure 2: Preliminary Soil Sample Locations
Figure 3: Excavation Soil Sample Locations
Figure 4: Proposed Excavation Area

Appendix B: Referenced Well Records

Appendix C: Photographic Log

Appendix D: Tables

Appendix E: Laboratory Analytical Reports & Chain-of-Custody Documentation

Appendix F: Correspondence & Notifications

APPENDIX A

Figures

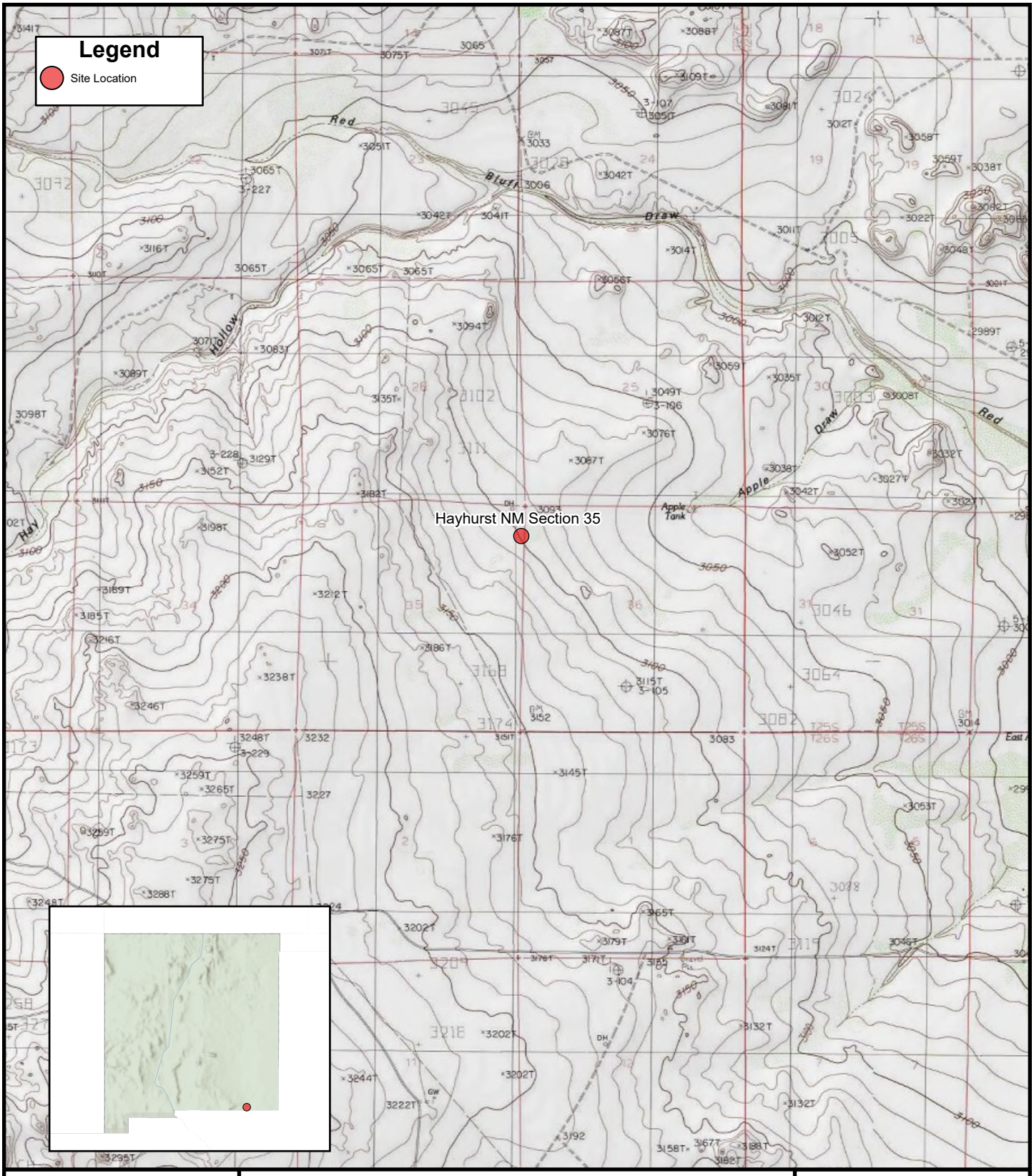

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FIGURE 1

Site Location Map

Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Unit A Sec 35 T25S R27E
Eddy County, New Mexico

N

0 2,000 4,000 Feet

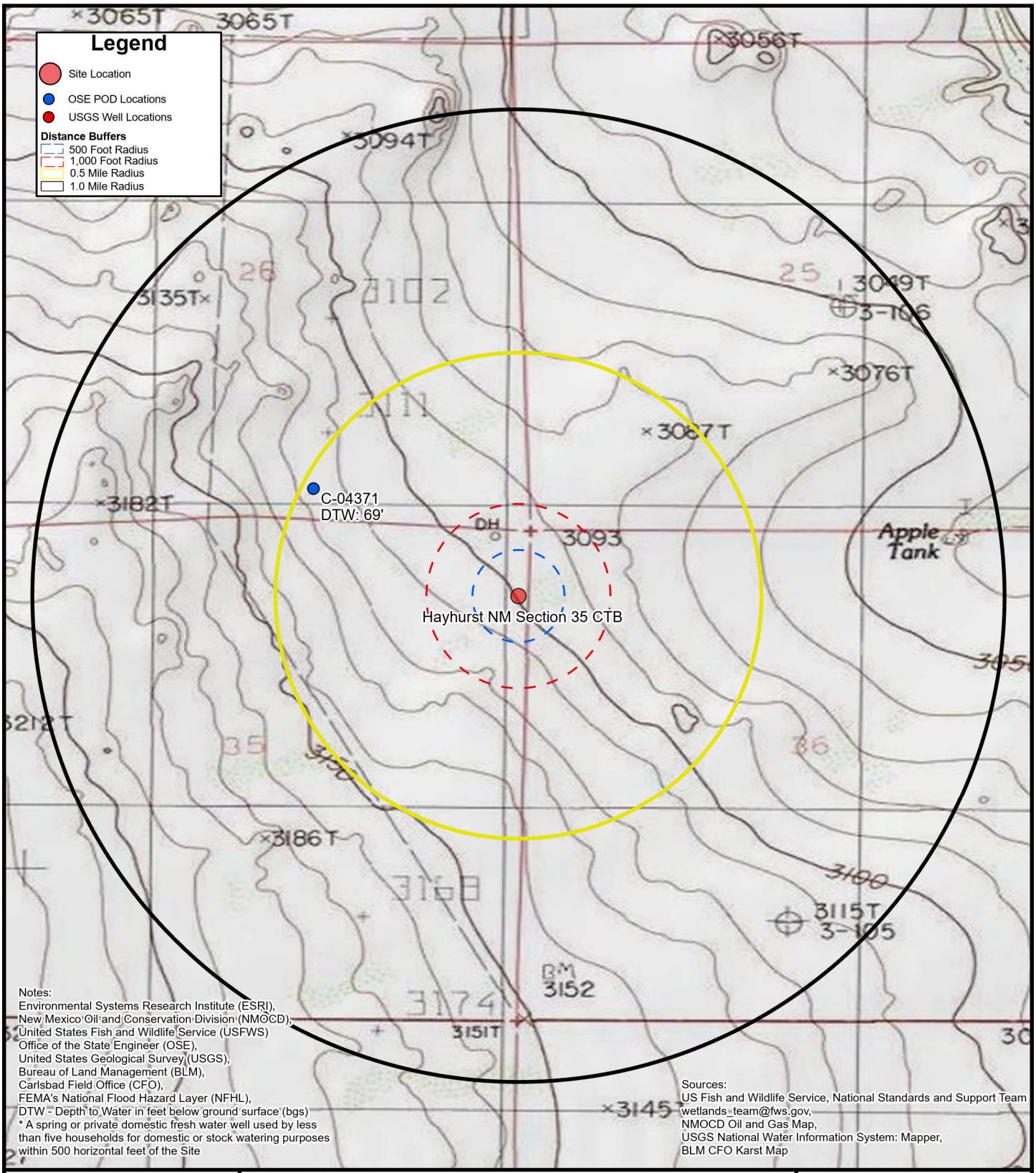

FIGURE 1A

Site Characterization Map

Ground Water

Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Unit A Sec 35 T25S R27E
Eddy County, New Mexico

N

0 500 1,000 Feet

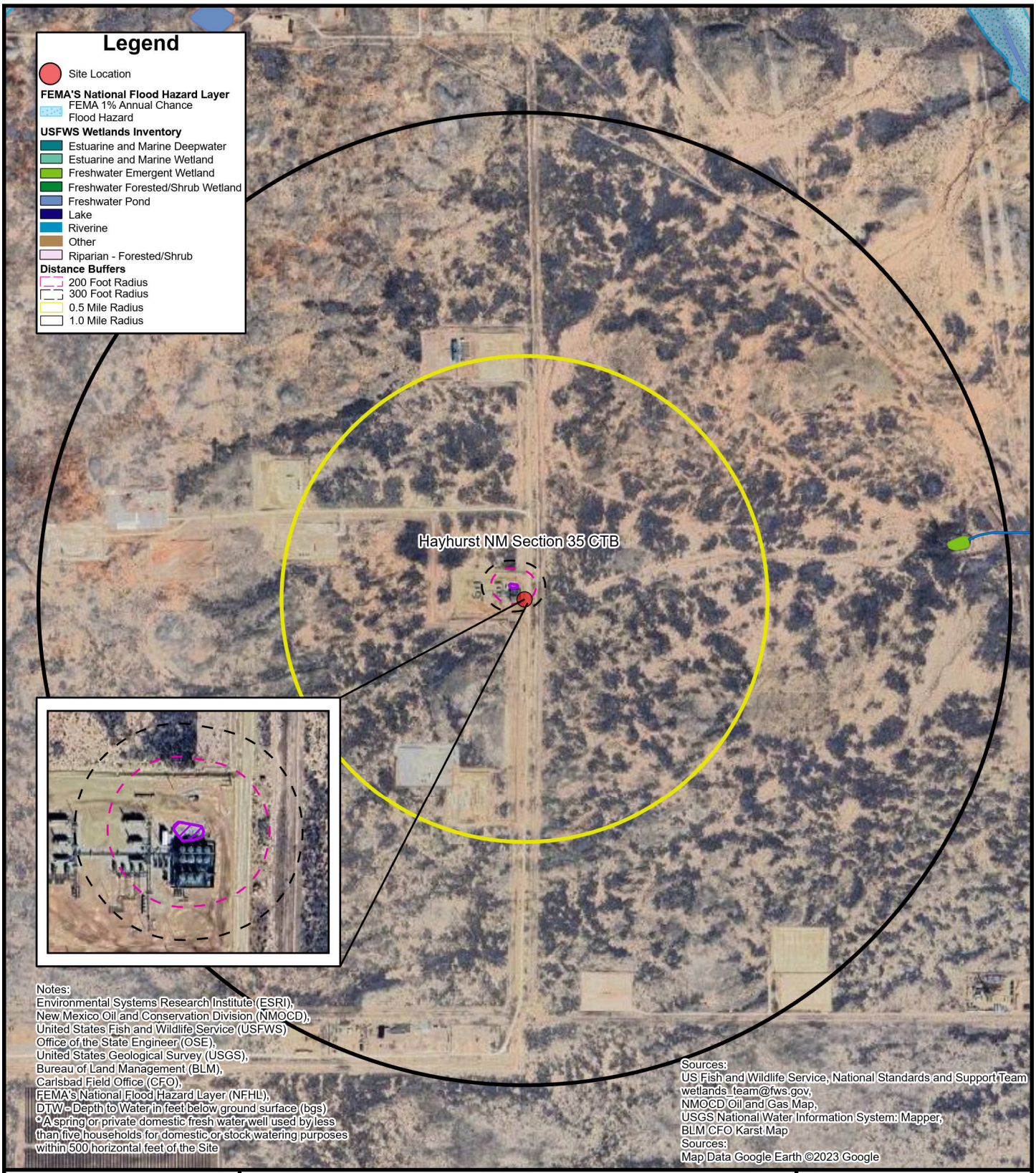

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FIGURE 1B

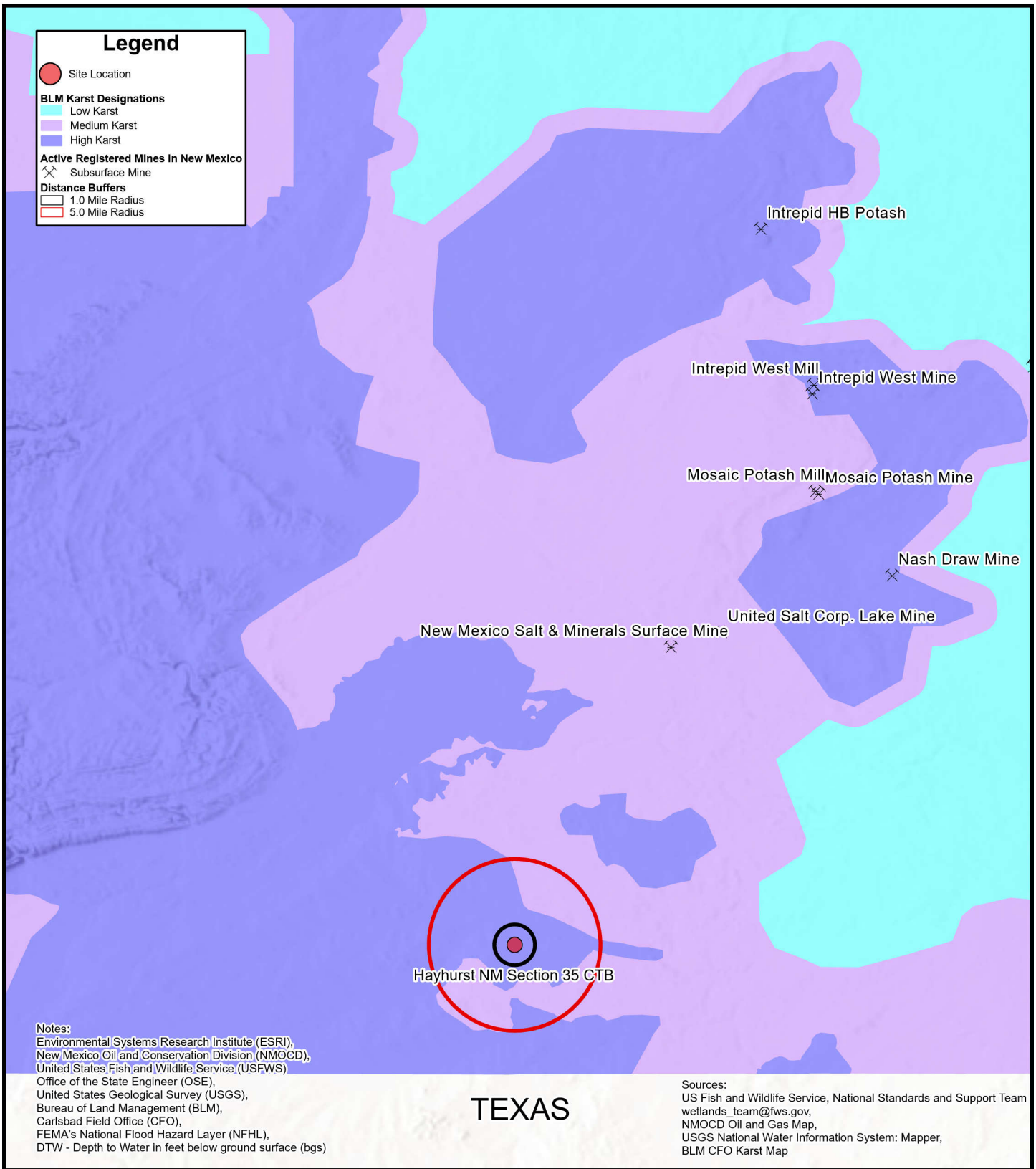
Site Characterization Map

Surficial Receptors

Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Unit A Sec 35 T25S R27E
Eddy County, New Mexico

N

0 500 1,000 Feet



Notes:
Environmental Systems Research Institute (ESRI),
New Mexico Oil and Conservation Division (NMOCD),
United States Fish and Wildlife Service (USFWS)
Office of the State Engineer (OSE),
United States Geological Survey (USGS),
Bureau of Land Management (BLM),
Carlsbad Field Office (CFO),
FEMA's National Flood Hazard Layer (NFHL),
DTW - Depth to Water in feet below ground surface (bgs)

Sources:
US Fish and Wildlife Service, National Standards and Support Team wetlands_team@fws.gov,
NMOCD Oil and Gas Map,
USGS National Water Information System: Mapper,
BLM CFO Karst Map

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FIGURE 1C

Site Characterization Map
Subsurface Receptors

Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Unit A Sec 35 T25S R27E
Eddy County, New Mexico

N

0 15,000 30,000 Feet

FIGURE 2

Preliminary Soil Sample Locations

Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Unit A Sec 35 T25S R27E
Eddy County, New Mexico

N

0 8.75 17.5 Feet

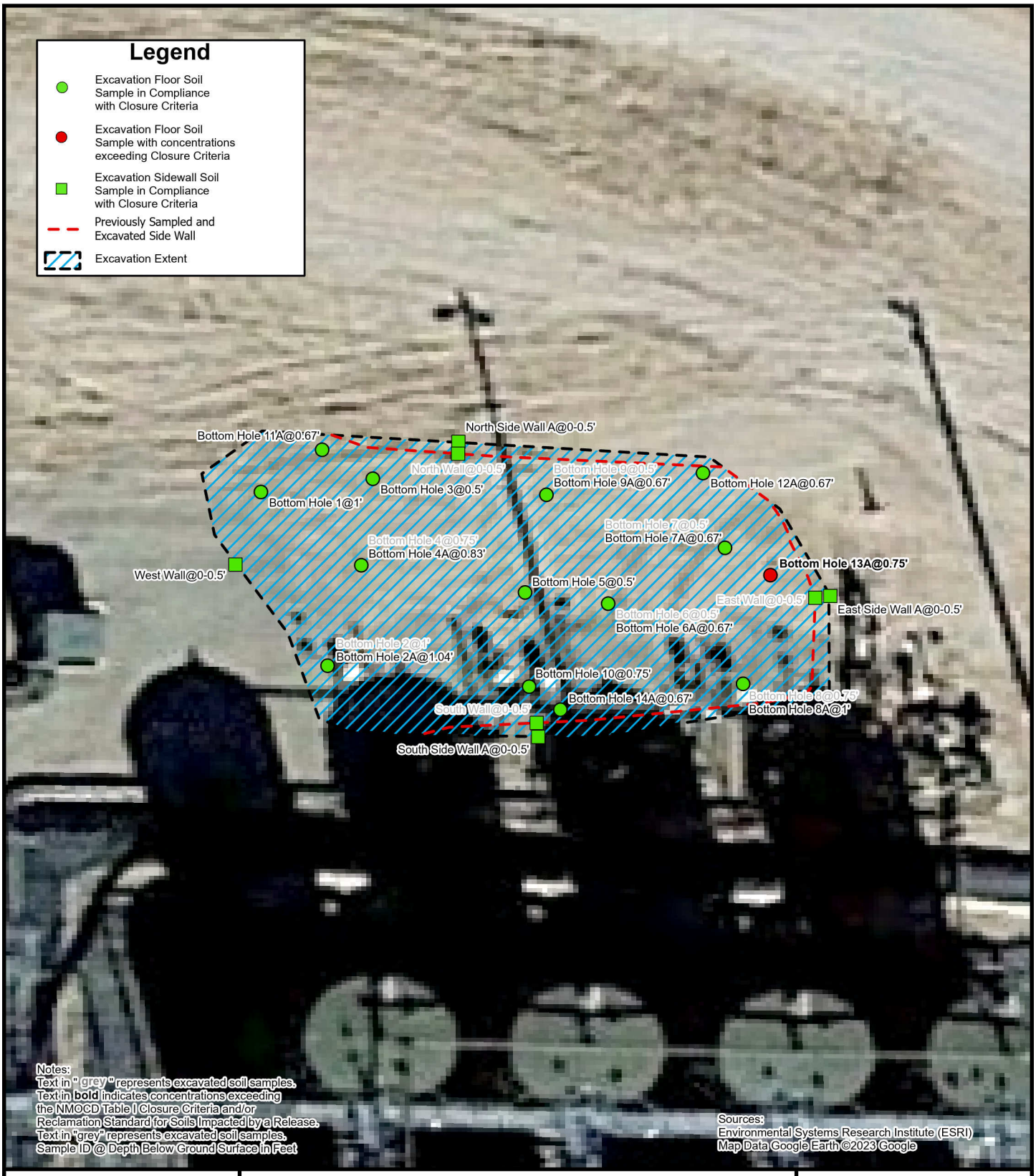

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FIGURE 3

Excavation Soil Sample Locations

Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Unit A Sec 35 T25S R27E
Eddy County, New Mexico

N

0 8.75 17.5 Feet

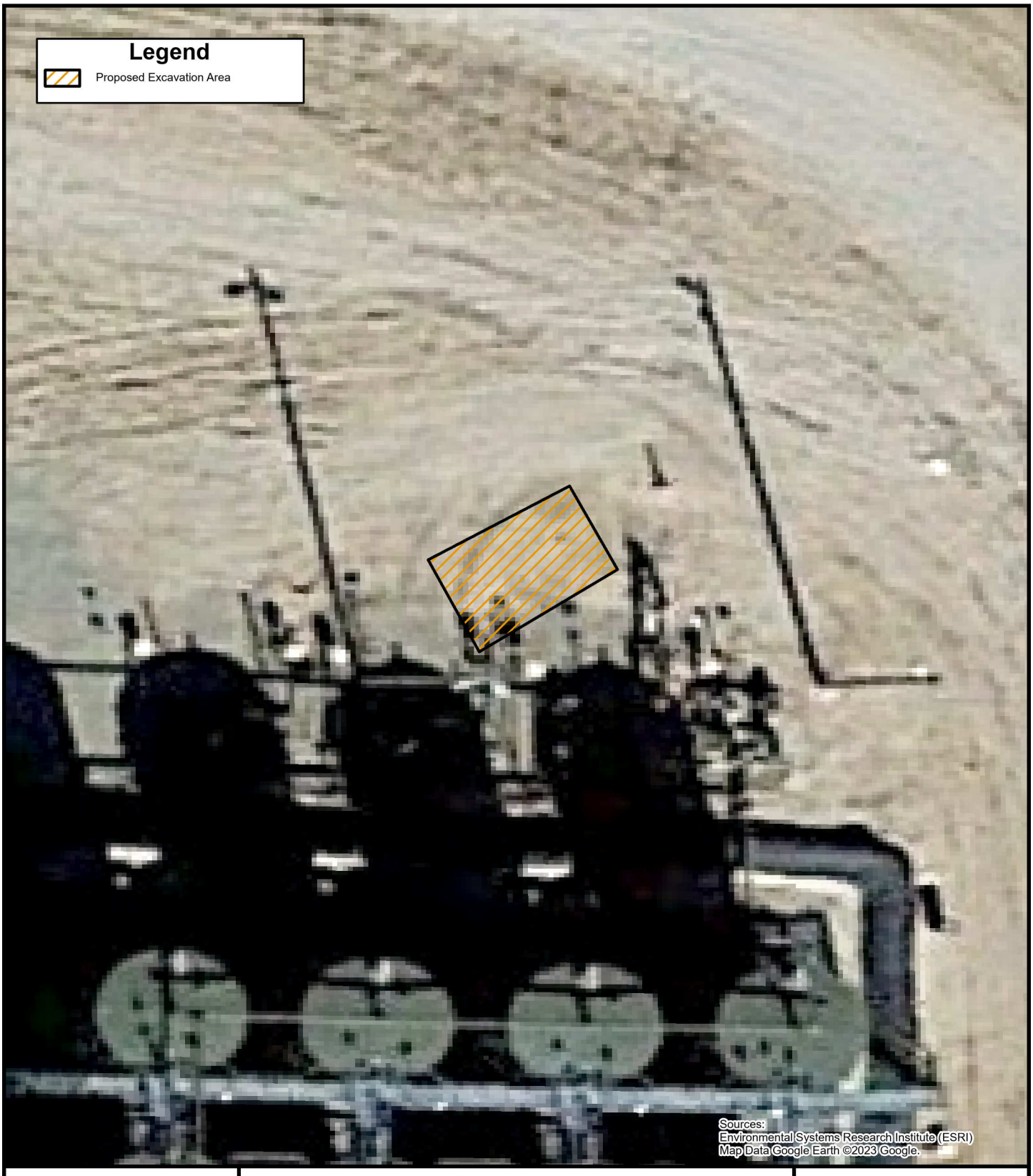

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FIGURE 4

Proposed Excavation Area

Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Unit A Sec 35 T25S R27E
Eddy County, New Mexico

N

0 8.75 17.5 Feet

APPENDIX B

Referenced Well Records

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

2019 NOV -4 PM 4:

STATE ENGINEER OFFICE ROSWELL, NEW MEXICO

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
N/A		C-4371

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Tetra Tech Inc. on behalf of Chevron N.A. E&P Co.	432-687-8130

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
901 W. Wall St. Suite 100	Midland	TX	79706

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	5	41.91	N
	LONGITUDE	104	9	31.92	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1456	John W. White	White Drilling Company, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
10/17/2019	10/17/2019		100	69

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 69

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO.	C-4371	POD NO.	1	TRN NO.	660311
LOCATION	25S.27E.26.433			WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	5	5	Tan clayey sand	Y ✓ N	
5	100	95	Gypsum	✓ Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Dallas Rader

6. SIGNATURE

BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.

SIGNATURE OF DRILLER / PRINT SIGNEE NAME

10:28:19
DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 04/30/2019)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2

APPENDIX C

Photographic Log

PHOTOGRAPHIC LOG
Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Incident Number nAPP2302742810

Photograph 1 **Date: 02/10/2023**
Description: Northwest view of site assessment.

Photograph 2 **Date: 02/10/2022**
Description: Northeast view of site assessment.

Photograph 3 **Date: 08/11/2023**
Description: Northern view of excavation activities.

Photograph 4 **Date: 08/11/2023**
Description: Western view of excavation activities.

PHOTOGRAPHIC LOG
Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Incident Number nAPP2302742810

Photograph 5 **Date: 08/11/2023**
Description: Southeastern view of excavation activities.

Photograph 6 **Date: 03/22/2024**
Description: Southeastern view of site restoration activities.

Photograph 7 **Date: 03/22/2024**
Description: Northeast view of site restoration activities.

Photograph 8 **Date: 03/22/2024**
Description: Southwest view of site restoration activities.

APPENDIX D

Tables

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (inches)	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**
Preliminary Soil Samples - Incident Number nAPP2302742810										
Sample Point 1	02/10/2023	0-3	0-0.25	<0.00116	0.00301	<29.1	55.5	<29.1	55.5	7.37
Sample Point 2	02/10/2023	0-3	0-0.25	<0.00114	32.8	2,380	8,470	270	**11,100**	5.25
Excavation Soil Samples - Incident Number nAPP2302742810										
Bottom Hole 1	08/11/2023	12	1	<0.00200	<0.00400	<49.6	<49.6	<49.6	<49.6	334
Bottom Hole 2	08/11/2023	12	1	<0.00199	<0.00398	<50.2	64.0	<50.2	64.0	**707**
Bottom Hole 2A	03/22/2024	12.5	1.04	<0.00103	<0.00206	<25.8	30.6	<25.8	30.6	170
Bottom Hole 3	08/11/2023	6	0.5	<0.00201	<0.00402	<50.4	<50.4	<50.4	<50.4	241
Bottom Hole 4	08/11/2023	9	0.75	<0.00200	<0.00401	<50.5	1,630	<50.5	**1,630**	469
Bottom Hole 4A	03/22/2024	10	0.83	<0.00105	<0.00211	<26.3	<26.3	<26.3	<26.3	75.4
Bottom Hole 5	08/11/2023	6	0.5	<0.00200	<0.00399	<50.0	53.7	<50.0	53.7	551
Bottom Hole 6	08/11/2023	6	0.5	<0.00199	<0.00398	<49.9	510	<49.9	**510**	583
Bottom Hole 6A	03/22/2024	8	0.67	<0.00106	<0.00213	<26.6	<26.6	<26.6	<26.6	111
Bottom Hole 7	08/11/2023	6	0.5	<0.00198	<0.00396	<50.2	<50.2	<50.2	<50.2	**706**
Bottom Hole 7A	03/22/2024	8	0.67	<0.00105	<0.00211	<26.3	<26.3	<26.3	<26.3	131
Bottom Hole 8	08/11/2023	9	0.75	<0.00199	<0.00398	<50.1	4,700	<50.1	**4,700**	399
Bottom Hole 8A	03/22/2024	12	1	<0.00110	<0.00220	<27.5	<27.5	<27.5	<27.5	60.3
Bottom Hole 9	08/11/2023	6	0.5	<0.00202	<0.00403	<50.5	295	<50.5	**295**	437
Bottom Hole 9A	03/22/2024	8	0.67	<0.00105	<0.00211	<26.3	<26.3	<26.3	<26.3	132
Bottom Hole 10	08/11/2023	9	0.75	<0.00201	<0.00402	<49.9	59.0	<49.9	59.0	306
Bottom Hole 11A	03/22/2024	8	0.67	<0.00105	<0.00211	<26.3	<26.3	<26.3	<26.3	107
Bottom Hole 12A	03/22/2024	8	0.67	<0.00104	<0.00208	<26.0	<26.0	<26.0	<26.0	231
Bottom Hole 13A	03/22/2024	8	0.67	<0.00108	<0.00215	<26.9	<26.9	<26.9	<26.9	**4,340**
Bottom Hole 14A	03/22/2024	8	0.67	<0.00104	<0.00208	<26.0	<26.0	<26.0	<26.0	236

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Chevron USA, Inc.
Hayhurst NM Section 35 CTB
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (inches)	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**
North Wall	08/11/2023	0-6	0-0.5	<0.00200	<0.00401	<49.6	167	<49.6	167	**803**
North Side Wall A	03/22/2024	0-6	0-0.5	<0.00103	<0.00206	<25.8	<25.8	<25.8	<25.8	127
South Wall	08/11/2023	0-6	0-0.5	<0.00200	<0.00400	<49.5	90.8	<49.5	90.8	**654**
South Side Wall A	03/22/2024	0-6	0-0.5	<0.00104	<0.00208	<26.0	<26.0	<26.0	<26.0	91.8
East Wall	08/11/2023	0-6	0-0.5	<0.00199	<0.00398	<50.0	51.2	<50.0	51.2	**1,710**
East Side Wall A	03/22/2024	0-6	0-0.5	<0.00102	<0.00204	26.5	<25.5	<25.5	26.5	282
West Wall	08/11/2023	0-6	0-0.5	<0.00198	<0.00396	<50.3	69.4	<50.3	69.4	360

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
Text in ""grey"" represents excavated soil samples
*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard[†] for Soils Impacted by a Release*
[†] The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.

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: Hayhurst Section 35 CTB

Project Number: 17586

Location: New Mexico

Lab Order Number: 3B15006

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 02/22/23

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Hayhurst Section 35 CTB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Sample Point -1 @ 0"-3"	3B15006-01	Soil	02/14/23 11:15	02-15-2023 12:36
Sample Point -2 @ 0"-3"	3B15006-02	Soil	02/14/23 11:19	02-15-2023 12:36

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Hayhurst Section 35 CTB
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Sample Point -1 @ 0''-3''

3B15006-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00116	mg/kg dry	1	P3B1610	02/16/23 15:49	02/16/23 21:15	EPA 8021B	
Toluene	ND	0.00116	mg/kg dry	1	P3B1610	02/16/23 15:49	02/16/23 21:15	EPA 8021B	
Ethylbenzene	ND	0.00116	mg/kg dry	1	P3B1610	02/16/23 15:49	02/16/23 21:15	EPA 8021B	
Xylene (p/m)	**0.00301**	0.00233	mg/kg dry	1	P3B1610	02/16/23 15:49	02/16/23 21:15	EPA 8021B	
Xylene (o)	ND	0.00116	mg/kg dry	1	P3B1610	02/16/23 15:49	02/16/23 21:15	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*76.1 %*	*80-120*		*P3B1610*	*02/16/23 15:49*	*02/16/23 21:15*	*EPA 8021B*	*S-GC*
Surrogate: 1,4-Difluorobenzene		*103 %*	*80-120*		*P3B1610*	*02/16/23 15:49*	*02/16/23 21:15*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	29.1	mg/kg dry	1	P3B1804	02/18/23 09:30	02/20/23 12:23	TPH 8015M	
>C12-C28	**55.5**	29.1	mg/kg dry	1	P3B1804	02/18/23 09:30	02/20/23 12:23	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P3B1804	02/18/23 09:30	02/20/23 12:23	TPH 8015M	
Surrogate: 1-Chlorooctane		*85.9 %*	*70-130*		*P3B1804*	*02/18/23 09:30*	*02/20/23 12:23*	*TPH 8015M*	
Surrogate: o-Terphenyl		*105 %*	*70-130*		*P3B1804*	*02/18/23 09:30*	*02/20/23 12:23*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**55.5**	29.1	mg/kg dry	1	[CALC]	02/18/23 09:30	02/20/23 12:23	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**7.37**	1.16	mg/kg dry	1	P3B1709	02/17/23 15:57	02/20/23 10:48	EPA 300.0	
% Moisture	**14.0**	0.1	%	1	P3B1603	02/16/23 10:06	02/16/23 10:10	ASTM D2216	

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Sample Point -2 @ 0''-3''

3B15006-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00114	mg/kg dry	1	P3B1610	02/16/23 15:49	02/16/23 21:36	EPA 8021B	
Toluene	**2.99**	0.0568	mg/kg dry	50	P3B1610	02/16/23 15:49	02/17/23 10:05	EPA 8021B	
Ethylbenzene	**2.23**	0.0568	mg/kg dry	50	P3B1610	02/16/23 15:49	02/17/23 10:05	EPA 8021B	
Xylene (p/m)	**20.6**	0.114	mg/kg dry	50	P3B1610	02/16/23 15:49	02/17/23 10:05	EPA 8021B	
Xylene (o)	**7.01**	0.0568	mg/kg dry	50	P3B1610	02/16/23 15:49	02/17/23 10:05	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		*82.3 %*	*80-120*		*P3B1610*	*02/16/23 15:49*	*02/17/23 10:05*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*113 %*	*80-120*		*P3B1610*	*02/16/23 15:49*	*02/17/23 10:05*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**2380**	142	mg/kg dry	5	P3B1804	02/18/23 09:30	02/21/23 08:51	TPH 8015M	
>C12-C28	**8470**	142	mg/kg dry	5	P3B1804	02/18/23 09:30	02/21/23 08:51	TPH 8015M	
>C28-C35	**270**	28.4	mg/kg dry	1	P3B1804	02/18/23 09:30	02/21/23 08:51	TPH 8015M	
Surrogate: 1-Chlorooctane		*97.2 %*	*70-130*		*P3B1804*	*02/18/23 09:30*	*02/21/23 08:51*	*TPH 8015M*	
Surrogate: o-Terphenyl		*109 %*	*70-130*		*P3B1804*	*02/18/23 09:30*	*02/21/23 08:51*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**11100**	142	mg/kg dry	5	[CALC]	02/18/23 09:30	02/21/23 08:51	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**5.25**	1.14	mg/kg dry	1	P3B1709	02/17/23 15:57	02/18/23 05:23	EPA 300.0	
% Moisture	**12.0**	0.1	%	1	P3B1603	02/16/23 10:06	02/16/23 10:10	ASTM D2216	

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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 P3B1610 - * DEFAULT PREP *** **										
Blank (P3B1610-BLK1)				Prepared & Analyzed: 02/16/23						
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	*0.127*		"	*0.120*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0832*		"	*0.120*		*69.3*	*80-120*			*S-GC*
LCS (P3B1610-BS1)				Prepared & Analyzed: 02/16/23						
Benzene	0.0962	0.00100	mg/kg	0.100		96.2	80-120			
Toluene	0.0895	0.00100	"	0.100		89.5	80-120			
Ethylbenzene	0.0973	0.00100	"	0.100		97.3	80-120			
Xylene (p/m)	0.161	0.00200	"	0.200		80.6	80-120			
Xylene (o)	0.0910	0.00100	"	0.100		91.0	80-120			
Surrogate: 4-Bromofluorobenzene	*0.0931*		"	*0.120*		*77.6*	*80-120*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.138*		"	*0.120*		*115*	*80-120*			
LCS Dup (P3B1610-BSD1)				Prepared & Analyzed: 02/16/23						
Benzene	0.105	0.00100	mg/kg	0.100		105	80-120	8.36	20	
Toluene	0.0993	0.00100	"	0.100		99.3	80-120	10.5	20	
Ethylbenzene	0.109	0.00100	"	0.100		109	80-120	10.9	20	
Xylene (p/m)	0.175	0.00200	"	0.200		87.5	80-120	8.18	20	
Xylene (o)	0.102	0.00100	"	0.100		102	80-120	11.3	20	
Surrogate: 1,4-Difluorobenzene	*0.142*		"	*0.120*		*119*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0976*		"	*0.120*		*81.3*	*80-120*			
Calibration Blank (P3B1610-CCB1)				Prepared & Analyzed: 02/16/23						
Benzene	0.00		ug/kg							
Toluene	0.00		"							
Ethylbenzene	0.120		"							
Xylene (p/m)	0.170		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	*0.0905*		"	*0.120*		*75.4*	*80-120*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.133*		"	*0.120*		*111*	*80-120*			

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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 P3B1610 - * DEFAULT PREP *** **										
Calibration Blank (P3B1610-CCB2)				Prepared & Analyzed: 02/16/23						
Benzene	0.00		ug/kg							
Toluene	0.00		"							
Ethylbenzene	0.110		"							
Xylene (p/m)	0.370		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	*0.125*		*"*	*0.120*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.0931*		*"*	*0.120*		*77.6*	*80-120*			*S-GC*
Calibration Check (P3B1610-CCV1)				Prepared & Analyzed: 02/16/23						
Benzene	0.116	0.00100	mg/kg	0.100		116	80-120			
Toluene	0.104	0.00100	"	0.100		104	80-120			
Ethylbenzene	0.103	0.00100	"	0.100		103	80-120			
Xylene (p/m)	0.177	0.00200	"	0.200		88.4	80-120			
Xylene (o)	0.107	0.00100	"	0.100		107	80-120			
Surrogate: 1,4-Difluorobenzene	*0.140*		*"*	*0.120*		*116*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0900*		*"*	*0.120*		*75.0*	*75-125*			
Calibration Check (P3B1610-CCV2)				Prepared & Analyzed: 02/16/23						
Benzene	0.106	0.00100	mg/kg	0.100		106	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)	0.184	0.00200	"	0.200		92.0	80-120			
Xylene (o)	0.105	0.00100	"	0.100		105	80-120			
Surrogate: 1,4-Difluorobenzene	*0.134*		*"*	*0.120*		*112*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.0969*		*"*	*0.120*		*80.7*	*75-125*			
Calibration Check (P3B1610-CCV3)				Prepared: 02/16/23 Analyzed: 02/17/23						
Benzene	0.113	0.00100	mg/kg	0.100		113	80-120			
Toluene	0.110	0.00100	"	0.100		110	80-120			
Ethylbenzene	0.111	0.00100	"	0.100		111	80-120			
Xylene (p/m)	0.188	0.00200	"	0.200		94.0	80-120			
Xylene (o)	0.111	0.00100	"	0.100		111	80-120			
Surrogate: 4-Bromofluorobenzene	*0.0963*		*"*	*0.120*		*80.2*	*75-125*			
Surrogate: 1,4-Difluorobenzene	*0.138*		*"*	*0.120*		*115*	*75-125*			

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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 P3B1610 - * DEFAULT PREP *** **										
Matrix Spike (P3B1610-MS1)	**Source: 3B14016-28**			Prepared: 02/16/23 Analyzed: 02/17/23						
Benzene	0.0885	0.00102	mg/kg dry	0.102	ND	86.8	80-120			
Toluene	0.0889	0.00102	"	0.102	ND	87.2	80-120			
Ethylbenzene	0.0979	0.00102	"	0.102	ND	96.0	80-120			
Xylene (p/m)	0.161	0.00204	"	0.204	ND	78.8	80-120			S-GC
Xylene (o)	0.0858	0.00102	"	0.102	ND	84.1	80-120			
Surrogate: 4-Bromofluorobenzene	*0.102*		"	*0.122*		*83.6*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.138*		"	*0.122*		*113*	*80-120*			
Matrix Spike Dup (P3B1610-MSD1)	**Source: 3B14016-28**			Prepared: 02/16/23 Analyzed: 02/17/23						
Benzene	0.0891	0.00102	mg/kg dry	0.102	ND	87.3	80-120	0.632	20	
Toluene	0.0854	0.00102	"	0.102	ND	83.7	80-120	4.03	20	
Ethylbenzene	0.0911	0.00102	"	0.102	ND	89.3	80-120	7.26	20	
Xylene (p/m)	0.147	0.00204	"	0.204	ND	72.2	80-120	8.80	20	QM-05
Xylene (o)	0.0809	0.00102	"	0.102	ND	79.3	80-120	5.89	20	QM-05
Surrogate: 4-Bromofluorobenzene	*0.0962*		"	*0.122*		*78.6*	*80-120*			*S-GC*
Surrogate: 1,4-Difluorobenzene	*0.140*		"	*0.122*		*114*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Hayhurst Section 35 CTB
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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 P3B1804 - TX 1005										
Blank (P3B1804-BLK1)				Prepared: 02/18/23 Analyzed: 02/20/23						
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*86.1*		*"*	*100*		*86.1*	*70-130*			
Surrogate: o-Terphenyl	*50.4*		*"*	*50.0*		*101*	*70-130*			
LCS (P3B1804-BS1)				Prepared: 02/18/23 Analyzed: 02/20/23						
C6-C12	854	25.0	mg/kg	1000		85.4	75-125			
>C12-C28	983	25.0	"	1000		98.3	75-125			
Surrogate: 1-Chlorooctane	*122*		*"*	*100*		*122*	*70-130*			
Surrogate: o-Terphenyl	*61.8*		*"*	*50.0*		*124*	*70-130*			
LCS Dup (P3B1804-BSD1)				Prepared: 02/18/23 Analyzed: 02/20/23						
C6-C12	846	25.0	mg/kg	1000		84.6	75-125	0.883	20	
>C12-C28	974	25.0	"	1000		97.4	75-125	0.951	20	
Surrogate: 1-Chlorooctane	*120*		*"*	*100*		*120*	*70-130*			
Surrogate: o-Terphenyl	*61.0*		*"*	*50.0*		*122*	*70-130*			
Calibration Check (P3B1804-CCV1)				Prepared: 02/18/23 Analyzed: 02/20/23						
C6-C12	465	25.0	mg/kg	500		93.1	85-115			
>C12-C28	466	25.0	"	500		93.3	85-115			
Surrogate: 1-Chlorooctane	*101*		*"*	*100*		*101*	*70-130*			
Surrogate: o-Terphenyl	*49.6*		*"*	*50.0*		*99.3*	*70-130*			
Calibration Check (P3B1804-CCV2)				Prepared: 02/18/23 Analyzed: 02/20/23						
C6-C12	445	25.0	mg/kg	500		89.0	85-115			
>C12-C28	448	25.0	"	500		89.7	85-115			
Surrogate: 1-Chlorooctane	*96.4*		*"*	*100*		*96.4*	*70-130*			
Surrogate: o-Terphenyl	*47.8*		*"*	*50.0*		*95.5*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Hayhurst Section 35 CTB
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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 P3B1804 - TX 1005										
Calibration Check (P3B1804-CCV3)				Prepared: 02/18/23 Analyzed: 02/20/23						
C6-C12	444	25.0	mg/kg	500		88.8	85-115			
>C12-C28	456	25.0	"	500		91.2	85-115			
Surrogate: 1-Chlorooctane	*97.3*		*"*	*100*		*97.3*	*70-130*			
Surrogate: o-Terphenyl	*47.8*		*"*	*50.0*		*95.6*	*70-130*			
Matrix Spike (P3B1804-MS1)		**Source: 3B14016-21**		Prepared: 02/18/23 Analyzed: 02/20/23						
C6-C12	696	25.5	mg/kg dry	1020	ND	68.2	75-125			QM-05
>C12-C28	819	25.5	"	1020	ND	80.3	75-125			
Surrogate: 1-Chlorooctane	*91.4*		*"*	*102*		*89.6*	*70-130*			
Surrogate: o-Terphenyl	*45.2*		*"*	*51.0*		*88.6*	*70-130*			
Matrix Spike Dup (P3B1804-MSD1)		**Source: 3B14016-21**		Prepared: 02/18/23 Analyzed: 02/20/23						
C6-C12	696	25.5	mg/kg dry	1020	ND	68.2	75-125	0.0117	20	QM-05
>C12-C28	820	25.5	"	1020	ND	80.3	75-125	0.0436	20	
Surrogate: 1-Chlorooctane	*90.9*		*"*	*102*		*89.1*	*70-130*			
Surrogate: o-Terphenyl	*46.4*		*"*	*51.0*		*90.9*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Hayhurst Section 35 CTB
13000 West County Road 100	Project Number: 17586
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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 P3B1603 - * DEFAULT PREP *** **										
Blank (P3B1603-BLK1)				Prepared & Analyzed: 02/16/23						
% Moisture	ND	0.1	%							
Duplicate (P3B1603-DUP1)		**Source: 3B14013-07**		Prepared & Analyzed: 02/16/23						
% Moisture	9.0	0.1	%		9.0			0.00	20	
Duplicate (P3B1603-DUP2)		**Source: 3B14015-07**		Prepared & Analyzed: 02/16/23						
% Moisture	10.0	0.1	%		10.0			0.00	20	
Duplicate (P3B1603-DUP3)		**Source: 3B14015-22**		Prepared & Analyzed: 02/16/23						
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P3B1603-DUP4)		**Source: 3B14016-09**		Prepared & Analyzed: 02/16/23						
% Moisture	10.0	0.1	%		10.0			0.00	20	
Duplicate (P3B1603-DUP5)		**Source: 3B14016-24**		Prepared & Analyzed: 02/16/23						
% Moisture	3.0	0.1	%		4.0			28.6	20	R3
Duplicate (P3B1603-DUP6)		**Source: 3B15004-01**		Prepared & Analyzed: 02/16/23						
% Moisture	7.0	0.1	%		7.0			0.00	20	
Duplicate (P3B1603-DUP7)		**Source: 3B15004-07**		Prepared & Analyzed: 02/16/23						
% Moisture	7.0	0.1	%		8.0			13.3	20	
Duplicate (P3B1603-DUP8)		**Source: 3B15007-02**		Prepared & Analyzed: 02/16/23						
% Moisture	8.0	0.1	%		8.0			0.00	20	
Batch P3B1709 - * DEFAULT PREP *** **										
Blank (P3B1709-BLK1)				Prepared: 02/17/23 Analyzed: 02/18/23						
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 P3B1709 - * DEFAULT PREP *** **										
LCS (P3B1709-BS1)				Prepared: 02/17/23 Analyzed: 02/18/23						
Chloride	21.4		mg/kg	20.0		107	90-110			
LCS Dup (P3B1709-BSD1)				Prepared: 02/17/23 Analyzed: 02/18/23						
Chloride	21.0		mg/kg	20.0		105	90-110	2.12	10	
Calibration Blank (P3B1709-CCB1)				Prepared & Analyzed: 02/17/23						
Chloride	-0.155		mg/kg							
Calibration Blank (P3B1709-CCB2)				Prepared: 02/17/23 Analyzed: 02/18/23						
Chloride	0.00		mg/kg							
Calibration Check (P3B1709-CCV1)				Prepared & Analyzed: 02/17/23						
Chloride	21.0		mg/kg	20.0		105	90-110			
Calibration Check (P3B1709-CCV2)				Prepared: 02/17/23 Analyzed: 02/18/23						
Chloride	21.5		mg/kg	20.0		108	90-110			
Calibration Check (P3B1709-CCV3)				Prepared: 02/17/23 Analyzed: 02/20/23						
Chloride	20.6		mg/kg	20.0		103	90-110			
Matrix Spike (P3B1709-MS1)		**Source: 3B14016-26**		Prepared: 02/17/23 Analyzed: 02/18/23						
Chloride	378	1.03	mg/kg dry	258	127	97.1	80-120			
Matrix Spike (P3B1709-MS2)		**Source: 3B15005-02**		Prepared: 02/17/23 Analyzed: 02/18/23						
Chloride	2910	10.2	mg/kg dry	510	2570	67.7	80-120			QM-05
Matrix Spike Dup (P3B1709-MSD1)		**Source: 3B14016-26**		Prepared: 02/17/23 Analyzed: 02/18/23						
Chloride	387	1.03	mg/kg dry	258	127	101	80-120	2.31	20	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Hayhurst Section 35 CTB
13000 West County Road 100	Project Number: 17586
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 P3B1709 - * DEFAULT PREP *** **										
Matrix Spike Dup (P3B1709-MSD2)	**Source: 3B15005-02**			Prepared: 02/17/23 Analyzed: 02/18/23						
Chloride	2440	10.2	mg/kg dry	510	2570	NR	80-120	17.8	20	QM-05

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Hayhurst Section 35 CTB
13000 West County Road 100	Project Number: 17586
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: 2/22/2023

Brent Barron, Laboratory Director/Technical Director

E Tech Environmental & Safety Solutions, Inc. [1]	Project: Hayhurst Section 35 CTB
13000 West County Road 100	Project Number: 17586
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

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 DP email: blake@etechenv.com

Project Name: NM Hayhurst Section 35 C2
Project #: 17586 Project Loc:
Area: PO#: 17586

☒ Bill Etech

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

(lab use only)
ORDER #: 3B15006

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
1	Sample Point 1	0	3"	2-10-23	11:15	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☒	☐	☐	☐	☐	☐	☐	☒	☐	☐	☒	☐	☐	☐	☒
2	Sample Point 2	0	3"	2-10-23	11:19	1	☒	☐	☐	☐	☐	☐	☐	☐	S	☒	☐	☐	☐	☐	☐	☐	☒	☐	☐	☒	☐	☐	☐	☒

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	2-15-23	12:36pm			
			[signature]	2/15/23	12:36

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: 4.2 NCF °C

40z

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Blake Estep
Etech Environmental & Safety Solutions
PO BOX 62228
Midland, Texas 79711
Generated 8/24/2023 10:08:42 AM

JOB DESCRIPTION

NM Hayhurst Section 35 CTB
SDG NUMBER 1786

JOB NUMBER

880-32113-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

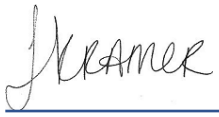
Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
8/24/2023 10:08:42 AM

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

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Laboratory Job ID: 880-32113-1
SDG: 1786

Table of Contents

Definitions/Glossary

Client: Etech Environmental & Safety Solutions Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB SDG: 1786

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
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: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Job ID: 880-32113-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-32113-1

Receipt
The samples were received on 8/15/2023 4:35 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 5.3°C

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: South Wall (880-32113-12), East Wall (880-32113-13), West Wall (880-32113-14) and (890-5106-A-1-G). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: Bottom Hole-2 (880-32113-2) and Bottom Hole-9 (880-32113-9). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-60871 and analytical batch 880-60869 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-60869 recovered above the upper control limit for Toluene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-60869/2).

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-60938 and analytical batch 880-60869 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-60869 recovered above the upper control limit for m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-60869/51).

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-60741 and analytical batch 880-60776 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-5126-A-1-D) and (890-5126-A-1-E MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: Bottom Hole-4 (880-32113-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: Bottom Hole-6 (880-32113-6), Bottom Hole-9 (880-32113-9) and Bottom Hole-10 (880-32113-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-60776/20), (CCV 880-60776/31) and (CCV 880-60776/5). Evidence of matrix interferences is not obvious.

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

Case Narrative

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Job ID: 880-32113-1 (Continued)

Laboratory: Eurofins Midland (Continued)

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
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Client Sample ID: Bottom Hole-1

Lab Sample ID: 880-32113-1
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/24/23 03:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/24/23 03:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/24/23 03:32	1
m-Xylene & p-Xylene	<0.00400	U *+	0.00400		mg/Kg		08/23/23 17:45	08/24/23 03:32	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/23/23 17:45	08/24/23 03:32	1
Xylenes, Total	<0.00400	U *+	0.00400		mg/Kg		08/23/23 17:45	08/24/23 03:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*08/23/23 17:45*	*08/24/23 03:32*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*08/23/23 17:45*	*08/24/23 03:32*	*1*

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/21/23 14:10	08/22/23 14:06	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/21/23 14:10	08/22/23 14:06	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/21/23 14:10	08/22/23 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*08/21/23 14:10*	*08/22/23 14:06*	*1*
o-Terphenyl	*98*		*70 - 130*	*08/21/23 14:10*	*08/22/23 14:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**334**		25.1		mg/Kg			08/18/23 21:39	5

Client Sample ID: Bottom Hole-2

Lab Sample ID: 880-32113-2
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/23/23 17:45	08/24/23 03:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/23/23 17:45	08/24/23 03:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/23/23 17:45	08/24/23 03:52	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		08/23/23 17:45	08/24/23 03:52	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		08/23/23 17:45	08/24/23 03:52	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		08/23/23 17:45	08/24/23 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*08/23/23 17:45*	*08/24/23 03:52*	*1*
1,4-Difluorobenzene (Surr)	*65*	*S1-*	*70 - 130*	*08/23/23 17:45*	*08/24/23 03:52*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB
SDG: 1786

Client Sample ID: Bottom Hole-2
Lab Sample ID: 880-32113-2
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**64.0**		50.2		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		08/21/23 14:10	08/22/23 14:29	1
Diesel Range Organics (Over C10-C28)	**64.0**		50.2		mg/Kg		08/21/23 14:10	08/22/23 14:29	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/21/23 14:10	08/22/23 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*08/21/23 14:10*	*08/22/23 14:29*	*1*
o-Terphenyl	*105*		*70 - 130*	*08/21/23 14:10*	*08/22/23 14:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**707**		49.8		mg/Kg			08/18/23 21:59	10

Client Sample ID: Bottom Hole-3
Lab Sample ID: 880-32113-3
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/23/23 17:45	08/24/23 04:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/23/23 17:45	08/24/23 04:13	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/23/23 17:45	08/24/23 04:13	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		08/23/23 17:45	08/24/23 04:13	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		08/23/23 17:45	08/24/23 04:13	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		08/23/23 17:45	08/24/23 04:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*08/23/23 17:45*	*08/24/23 04:13*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*08/23/23 17:45*	*08/24/23 04:13*	*1*

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		08/21/23 14:10	08/22/23 14:50	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/21/23 14:10	08/22/23 14:50	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Client Sample ID: Bottom Hole-3

Lab Sample ID: 880-32113-3
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/21/23 14:10	08/22/23 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*08/21/23 14:10*	*08/22/23 14:50*	*1*
o-Terphenyl	*111*		*70 - 130*	*08/21/23 14:10*	*08/22/23 14:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**241**		24.9		mg/Kg			08/18/23 22:06	5

Client Sample ID: Bottom Hole-4

Lab Sample ID: 880-32113-4
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/24/23 04:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/24/23 04:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/24/23 04:33	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		08/23/23 17:45	08/24/23 04:33	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/23/23 17:45	08/24/23 04:33	1
Xylenes, Total	<0.00401	U *+	0.00401		mg/Kg		08/23/23 17:45	08/24/23 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*08/23/23 17:45*	*08/24/23 04:33*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*08/23/23 17:45*	*08/24/23 04:33*	*1*

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1630**		50.5		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		08/21/23 14:10	08/22/23 15:12	1
Diesel Range Organics (Over C10-C28)	**1630**		50.5		mg/Kg		08/21/23 14:10	08/22/23 15:12	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/21/23 14:10	08/22/23 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*08/21/23 14:10*	*08/22/23 15:12*	*1*
o-Terphenyl	*112*		*70 - 130*	*08/21/23 14:10*	*08/22/23 15:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**469**		50.2		mg/Kg			08/18/23 22:13	10

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Client Sample ID: Bottom Hole-5

Lab Sample ID: 880-32113-5
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/24/23 04:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/24/23 04:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/24/23 04:53	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		08/23/23 17:45	08/24/23 04:53	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/23/23 17:45	08/24/23 04:53	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		08/23/23 17:45	08/24/23 04:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*08/23/23 17:45*	*08/24/23 04:53*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*08/23/23 17:45*	*08/24/23 04:53*	*1*

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**53.7**		50.0		mg/Kg			08/23/23 11:00	1

Method: SW846 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		08/21/23 14:10	08/22/23 15:55	1
Diesel Range Organics (Over C10-C28)	**53.7**		50.0		mg/Kg		08/21/23 14:10	08/22/23 15:55	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/21/23 14:10	08/22/23 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*08/21/23 14:10*	*08/22/23 15:55*	*1*
o-Terphenyl	*104*		*70 - 130*	*08/21/23 14:10*	*08/22/23 15:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**551**		50.2		mg/Kg			08/18/23 22:19	10

Client Sample ID: Bottom Hole-6

Lab Sample ID: 880-32113-6
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/23/23 17:45	08/24/23 05:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/23/23 17:45	08/24/23 05:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/23/23 17:45	08/24/23 05:14	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		08/23/23 17:45	08/24/23 05:14	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		08/23/23 17:45	08/24/23 05:14	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		08/23/23 17:45	08/24/23 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/23/23 17:45*	*08/24/23 05:14*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*08/23/23 17:45*	*08/24/23 05:14*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Client Sample ID: Bottom Hole-6

Lab Sample ID: 880-32113-6
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**510**		49.9		mg/Kg			08/23/23 11:00	1

Method: SW846 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		08/21/23 14:10	08/22/23 16:17	1
Diesel Range Organics (Over C10-C28)	**510**		49.9		mg/Kg		08/21/23 14:10	08/22/23 16:17	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/21/23 14:10	08/22/23 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*136*	*S1+*	*70 - 130*	*08/21/23 14:10*	*08/22/23 16:17*	*1*
o-Terphenyl	*119*		*70 - 130*	*08/21/23 14:10*	*08/22/23 16:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**583**		25.2		mg/Kg			08/18/23 22:39	5

Client Sample ID: Bottom Hole-7

Lab Sample ID: 880-32113-7
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/23/23 17:45	08/24/23 05:34	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/23/23 17:45	08/24/23 05:34	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/23/23 17:45	08/24/23 05:34	1
m-Xylene & p-Xylene	<0.00396	U *+	0.00396		mg/Kg		08/23/23 17:45	08/24/23 05:34	1
o-Xylene	<0.00198	U *+	0.00198		mg/Kg		08/23/23 17:45	08/24/23 05:34	1
Xylenes, Total	<0.00396	U *+	0.00396		mg/Kg		08/23/23 17:45	08/24/23 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*08/23/23 17:45*	*08/24/23 05:34*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*08/23/23 17:45*	*08/24/23 05:34*	*1*

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		08/21/23 14:10	08/22/23 16:39	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		08/21/23 14:10	08/22/23 16:39	1

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Client Sample ID: Bottom Hole-7

Lab Sample ID: 880-32113-7
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/21/23 14:10	08/22/23 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*08/21/23 14:10*	*08/22/23 16:39*	*1*
o-Terphenyl	*101*		*70 - 130*	*08/21/23 14:10*	*08/22/23 16:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**706**		49.9		mg/Kg			08/18/23 22:46	10

Client Sample ID: Bottom Hole-8

Lab Sample ID: 880-32113-8
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/23/23 17:45	08/24/23 05:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/23/23 17:45	08/24/23 05:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/23/23 17:45	08/24/23 05:55	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		08/23/23 17:45	08/24/23 05:55	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		08/23/23 17:45	08/24/23 05:55	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		08/23/23 17:45	08/24/23 05:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*08/23/23 17:45*	*08/24/23 05:55*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*08/23/23 17:45*	*08/24/23 05:55*	*1*

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**4700**		50.1		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		08/21/23 14:10	08/22/23 17:00	1
Diesel Range Organics (Over C10-C28)	**4700**		50.1		mg/Kg		08/21/23 14:10	08/22/23 17:00	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/21/23 14:10	08/22/23 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*08/21/23 14:10*	*08/22/23 17:00*	*1*
o-Terphenyl	*101*		*70 - 130*	*08/21/23 14:10*	*08/22/23 17:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**399**		24.9		mg/Kg			08/18/23 22:53	5

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Client Sample ID: Bottom Hole-9

Lab Sample ID: 880-32113-9
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/23/23 17:45	08/24/23 06:15	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/23/23 17:45	08/24/23 06:15	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/23/23 17:45	08/24/23 06:15	1
m-Xylene & p-Xylene	<0.00403	U *+	0.00403		mg/Kg		08/23/23 17:45	08/24/23 06:15	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		08/23/23 17:45	08/24/23 06:15	1
Xylenes, Total	<0.00403	U *+	0.00403		mg/Kg		08/23/23 17:45	08/24/23 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/23/23 17:45*	*08/24/23 06:15*	*1*
1,4-Difluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*08/23/23 17:45*	*08/24/23 06:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**295**		50.5		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		08/21/23 14:10	08/22/23 17:22	1
Diesel Range Organics (Over C10-C28)	**295**		50.5		mg/Kg		08/21/23 14:10	08/22/23 17:22	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/21/23 14:10	08/22/23 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*08/21/23 14:10*	*08/22/23 17:22*	*1*
o-Terphenyl	*115*		*70 - 130*	*08/21/23 14:10*	*08/22/23 17:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**437**		49.5		mg/Kg			08/18/23 22:59	10

Client Sample ID: Bottom Hole-10

Lab Sample ID: 880-32113-10
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/23/23 17:45	08/24/23 06:36	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/23/23 17:45	08/24/23 06:36	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/23/23 17:45	08/24/23 06:36	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		08/23/23 17:45	08/24/23 06:36	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		08/23/23 17:45	08/24/23 06:36	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		08/23/23 17:45	08/24/23 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/23/23 17:45*	*08/24/23 06:36*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*08/23/23 17:45*	*08/24/23 06:36*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Client Sample ID: Bottom Hole-10

Lab Sample ID: 880-32113-10
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**59.0**		49.9		mg/Kg			08/23/23 11:00	1

Method: SW846 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		08/21/23 14:10	08/22/23 17:44	1
Diesel Range Organics (Over C10-C28)	**59.0**		49.9		mg/Kg		08/21/23 14:10	08/22/23 17:44	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/21/23 14:10	08/22/23 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*08/21/23 14:10*	*08/22/23 17:44*	*1*
o-Terphenyl	*116*		*70 - 130*	*08/21/23 14:10*	*08/22/23 17:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**306**		25.1		mg/Kg			08/18/23 23:06	5

Client Sample ID: North Wall

Lab Sample ID: 880-32113-11
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 18:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 18:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 18:19	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		08/23/23 08:45	08/23/23 18:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 18:19	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/23/23 08:45	08/23/23 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*08/23/23 08:45*	*08/23/23 18:19*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*08/23/23 08:45*	*08/23/23 18:19*	*1*

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**167**		49.6		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/21/23 14:10	08/22/23 18:05	1
Diesel Range Organics (Over C10-C28)	**167**		49.6		mg/Kg		08/21/23 14:10	08/22/23 18:05	1

Eurofins Midland

Client Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Client Sample ID: North Wall

Lab Sample ID: 880-32113-11
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/21/23 14:10	08/22/23 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*08/21/23 14:10*	*08/22/23 18:05*	*1*
o-Terphenyl	*97*		*70 - 130*	*08/21/23 14:10*	*08/22/23 18:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**803**		49.9		mg/Kg			08/18/23 23:13	10

Client Sample ID: South Wall

Lab Sample ID: 880-32113-12
Matrix: Solid
Date Collected: 08/11/23 14:53
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 18:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 18:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 18:40	1
m-Xylene & p-Xylene	<0.00400	U *+	0.00400		mg/Kg		08/23/23 08:45	08/23/23 18:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 18:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/23/23 08:45	08/23/23 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/23/23 08:45*	*08/23/23 18:40*	*1*
1,4-Difluorobenzene (Surr)	*56*	*S1-*	*70 - 130*	*08/23/23 08:45*	*08/23/23 18:40*	*1*

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**90.8**		49.5		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5		mg/Kg		08/21/23 14:10	08/22/23 18:27	1
Diesel Range Organics (Over C10-C28)	**90.8**		49.5		mg/Kg		08/21/23 14:10	08/22/23 18:27	1
OII Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		08/21/23 14:10	08/22/23 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*08/21/23 14:10*	*08/22/23 18:27*	*1*
o-Terphenyl	*112*		*70 - 130*	*08/21/23 14:10*	*08/22/23 18:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**654**		25.0		mg/Kg			08/18/23 23:33	5

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB
SDG: 1786

Client Sample ID: East Wall
Lab Sample ID: 880-32113-13
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/23/23 08:45	08/23/23 19:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/23/23 08:45	08/23/23 19:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/23/23 08:45	08/23/23 19:00	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		08/23/23 08:45	08/23/23 19:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/23/23 08:45	08/23/23 19:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/23/23 08:45	08/23/23 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*08/23/23 08:45*	*08/23/23 19:00*	*1*
1,4-Difluorobenzene (Surr)	*59*	*S1-*	*70 - 130*	*08/23/23 08:45*	*08/23/23 19:00*	*1*

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**51.2**		50.0		mg/Kg			08/23/23 11:00	1

Method: SW846 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		08/21/23 14:10	08/22/23 18:49	1
Diesel Range Organics (Over C10-C28)	**51.2**		50.0		mg/Kg		08/21/23 14:10	08/22/23 18:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/21/23 14:10	08/22/23 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*08/21/23 14:10*	*08/22/23 18:49*	*1*
o-Terphenyl	*110*		*70 - 130*	*08/21/23 14:10*	*08/22/23 18:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1710**		49.9		mg/Kg			08/18/23 23:39	10

Client Sample ID: West Wall
Lab Sample ID: 880-32113-14
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/23/23 08:45	08/23/23 19:21	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/23/23 08:45	08/23/23 19:21	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/23/23 08:45	08/23/23 19:21	1
m-Xylene & p-Xylene	<0.00396	U *+	0.00396		mg/Kg		08/23/23 08:45	08/23/23 19:21	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/23/23 08:45	08/23/23 19:21	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/23/23 08:45	08/23/23 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/23/23 08:45*	*08/23/23 19:21*	*1*
1,4-Difluorobenzene (Surr)	*58*	*S1-*	*70 - 130*	*08/23/23 08:45*	*08/23/23 19:21*	*1*

Client Sample Results

Client: Etech Environmental & Safety Solutions
Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB
SDG: 1786

Client Sample ID: West Wall
Lab Sample ID: 880-32113-14
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

Method: TAL SOP 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			08/24/23 10:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**69.4**		50.3		mg/Kg			08/23/23 11:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/21/23 14:10	08/22/23 19:11	1
Diesel Range Organics (Over C10-C28)	**69.4**		50.3		mg/Kg		08/21/23 14:10	08/22/23 19:11	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/21/23 14:10	08/22/23 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*08/21/23 14:10*	*08/22/23 19:11*	*1*
o-Terphenyl	*98*		*70 - 130*	*08/21/23 14:10*	*08/22/23 19:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**360**		50.1		mg/Kg			08/18/23 23:59	10

Surrogate Summary

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

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)										
880-31986-A-1-E MS	Matrix Spike	122	113										
880-31986-A-1-G MSD	Matrix Spike Duplicate	127	120										
880-32113-1	Bottom Hole-1	85	73										
880-32113-2	Bottom Hole-2	112	65 S1-										
880-32113-3	Bottom Hole-3	92	73										
880-32113-4	Bottom Hole-4	103	92										
880-32113-5	Bottom Hole-5	102	76										
880-32113-6	Bottom Hole-6	106	80										
880-32113-7	Bottom Hole-7	105	75										
880-32113-8	Bottom Hole-8	122	112										
880-32113-9	Bottom Hole-9	104	66 S1-										
880-32113-10	Bottom Hole-10	98	75										
880-32113-11	North Wall	82	73										
880-32113-12	South Wall	101	56 S1-										
880-32113-13	East Wall	102	59 S1-										
880-32113-14	West Wall	99	58 S1-										
890-5106-A-1-E MS	Matrix Spike	127	109										
890-5106-A-1-F MSD	Matrix Spike Duplicate	127	110										
LCS 880-60871/1-A	Lab Control Sample	119	110										
LCS 880-60938/1-A	Lab Control Sample	121	109										
LCSD 880-60871/2-A	Lab Control Sample Dup	118	114										
LCSD 880-60938/2-A	Lab Control Sample Dup	122	106										
MB 880-60871/5-A	Method Blank	73	96										
MB 880-60938/5-A	Method Blank	73	80										

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)										
880-32113-1	Bottom Hole-1	112	98										
880-32113-2	Bottom Hole-2	120	105										
880-32113-3	Bottom Hole-3	125	111										
880-32113-4	Bottom Hole-4	139 S1+	112										
880-32113-5	Bottom Hole-5	120	104										
880-32113-6	Bottom Hole-6	136 S1+	119										
880-32113-7	Bottom Hole-7	115	101										
880-32113-8	Bottom Hole-8	126	101										
880-32113-9	Bottom Hole-9	135 S1+	115										
880-32113-10	Bottom Hole-10	131 S1+	116										
880-32113-11	North Wall	114	97										
880-32113-12	South Wall	128	112										
880-32113-13	East Wall	124	110										
880-32113-14	West Wall	114	98										
890-5126-A-1-E MS	Matrix Spike	133 S1+	104										

Surrogate Summary

Client: Etech Environmental & Safety Solutions Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB SDG: 1786

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-5126-A-1-F MSD	Matrix Spike Duplicate	129	101								
LCS 880-60741/2-A	Lab Control Sample	107	91								
LCSD 880-60741/3-A	Lab Control Sample Dup	123	106								
MB 880-60741/1-A	Method Blank	187 S1+	168 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-60871/5-A
Matrix: Solid
Analysis Batch: 60869

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60871

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 12:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 12:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 12:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/23/23 08:45	08/23/23 12:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/23/23 08:45	08/23/23 12:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/23/23 08:45	08/23/23 12:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*08/23/23 08:45*	*08/23/23 12:07*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*08/23/23 08:45*	*08/23/23 12:07*	*1*

Lab Sample ID: LCS 880-60871/1-A
Matrix: Solid
Analysis Batch: 60869

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60871

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1017		mg/Kg		102	70 - 130
Toluene	0.100	0.1196		mg/Kg		120	70 - 130
Ethylbenzene	0.100	0.1179		mg/Kg		118	70 - 130
m-Xylene & p-Xylene	0.200	0.2633	*+	mg/Kg		132	70 - 130
o-Xylene	0.100	0.1279		mg/Kg		128	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 880-60871/2-A
Matrix: Solid
Analysis Batch: 60869

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60871

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09507		mg/Kg		95	70 - 130	7	35
Toluene	0.100	0.1040		mg/Kg		104	70 - 130	14	35
Ethylbenzene	0.100	0.09942		mg/Kg		99	70 - 130	17	35
m-Xylene & p-Xylene	0.200	0.2191		mg/Kg		110	70 - 130	18	35
o-Xylene	0.100	0.1079		mg/Kg		108	70 - 130	17	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: 880-31986-A-1-E MS
Matrix: Solid
Analysis Batch: 60869

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 60871

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.08878		mg/Kg		89	70 - 130
Toluene	<0.00199	U	0.0996	0.1046		mg/Kg		105	70 - 130

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

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

Lab Sample ID: 880-31986-A-1-E MS | **Client Sample ID: Matrix Spike**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 60869 | **Prep Batch: 60871**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.1053		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	<0.00398	U *+	0.199	0.2310		mg/Kg		116	70 - 130
o-Xylene	<0.00199	U	0.0996	0.1126		mg/Kg		113	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: 880-31986-A-1-G MSD | **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 60869 | **Prep Batch: 60871**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.09959		mg/Kg		99	70 - 130	11	35
Toluene	<0.00199	U	0.100	0.1090		mg/Kg		109	70 - 130	4	35
Ethylbenzene	<0.00199	U	0.100	0.1104		mg/Kg		110	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U *+	0.200	0.2439		mg/Kg		122	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.1189		mg/Kg		119	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*

Lab Sample ID: MB 880-60938/5-A | **Client Sample ID: Method Blank**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 60869 | **Prep Batch: 60938**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/23/23 22:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/23/23 22:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/23/23 22:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/23/23 17:45	08/23/23 22:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/23/23 17:45	08/23/23 22:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/23/23 17:45	08/23/23 22:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*08/23/23 17:45*	*08/23/23 22:44*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*08/23/23 17:45*	*08/23/23 22:44*	*1*

Lab Sample ID: LCS 880-60938/1-A | **Client Sample ID: Lab Control Sample**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 60869 | **Prep Batch: 60938**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1023		mg/Kg		102	70 - 130
Toluene	0.100	0.1241		mg/Kg		124	70 - 130
Ethylbenzene	0.100	0.1257		mg/Kg		126	70 - 130
m-Xylene & p-Xylene	0.200	0.2796	*+	mg/Kg		140	70 - 130

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

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

Lab Sample ID: LCS 880-60938/1-A
Matrix: Solid
Analysis Batch: 60869

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60938

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1363	*+	mg/Kg		136	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: LCSD 880-60938/2-A
Matrix: Solid
Analysis Batch: 60869

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60938

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08296		mg/Kg		83	70 - 130	21	35
Toluene			0.100	0.09693		mg/Kg		97	70 - 130	25	35
Ethylbenzene			0.100	0.09971		mg/Kg		100	70 - 130	23	35
m-Xylene & p-Xylene			0.200	0.2231		mg/Kg		112	70 - 130	23	35
o-Xylene			0.100	0.1102		mg/Kg		110	70 - 130	21	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 890-5106-A-1-E MS
Matrix: Solid
Analysis Batch: 60869

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 60938

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0996	0.08986		mg/Kg		90	70 - 130		
Toluene	<0.00199	U	0.0996	0.1062		mg/Kg		107	70 - 130		
Ethylbenzene	<0.00199	U	0.0996	0.1113		mg/Kg		112	70 - 130		
m-Xylene & p-Xylene	<0.00398	U *+	0.199	0.2432		mg/Kg		122	70 - 130		
o-Xylene	<0.00199	U *+	0.0996	0.1213		mg/Kg		122	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 890-5106-A-1-F MSD
Matrix: Solid
Analysis Batch: 60869

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 60938

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.09515		mg/Kg		94	70 - 130	6	35
Toluene	<0.00199	U	0.101	0.1089		mg/Kg		108	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.101	0.1111		mg/Kg		110	70 - 130	0	35
m-Xylene & p-Xylene	<0.00398	U *+	0.202	0.2432		mg/Kg		121	70 - 130	0	35
o-Xylene	<0.00199	U *+	0.101	0.1217		mg/Kg		121	70 - 130	0	35

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

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

Lab Sample ID: 890-5106-A-1-F MSD
Matrix: Solid
Analysis Batch: 60869

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 60938

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

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

Lab Sample ID: MB 880-60741/1-A
Matrix: Solid
Analysis Batch: 60776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60741

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		08/21/23 14:10	08/22/23 08:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/21/23 14:10	08/22/23 08:13	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/21/23 14:10	08/22/23 08:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	187	S1+	70 - 130	08/21/23 14:10	08/22/23 08:13	1
o-Terphenyl	168	S1+	70 - 130	08/21/23 14:10	08/22/23 08:13	1

Lab Sample ID: LCS 880-60741/2-A
Matrix: Solid
Analysis Batch: 60776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60741

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	938.0		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	881.7		mg/Kg		88	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: LCSD 880-60741/3-A
Matrix: Solid
Analysis Batch: 60776

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60741

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1012		mg/Kg		101	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	995.8		mg/Kg		100	70 - 130	12	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	106		70 - 130

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

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

Lab Sample ID: 890-5126-A-1-E MS
Matrix: Solid
Analysis Batch: 60776

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 60741

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	995	1258		mg/Kg		124	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	995	1150		mg/Kg		114	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: 890-5126-A-1-F MSD
Matrix: Solid
Analysis Batch: 60776

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 60741

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	<49.6	U	995	1241		mg/Kg		123	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.6	U	995	1117		mg/Kg		111	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*129*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-60360/1-A
Matrix: Solid
Analysis Batch: 60617

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			08/18/23 21:19	1

Lab Sample ID: LCS 880-60360/2-A
Matrix: Solid
Analysis Batch: 60617

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	258.3		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-60360/3-A
Matrix: Solid
Analysis Batch: 60617

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	258.8		mg/Kg		104	90 - 110	0	20

QC Sample Results

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-32113-1 MS
Matrix: Solid
Analysis Batch: 60617

Client Sample ID: Bottom Hole-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	334		1250	1625		mg/Kg		103	90 - 110		

Lab Sample ID: 880-32113-1 MSD
Matrix: Solid
Analysis Batch: 60617

Client Sample ID: Bottom Hole-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	334		1250	1634		mg/Kg		104	90 - 110	1	20

Lab Sample ID: 880-32113-11 MS
Matrix: Solid
Analysis Batch: 60617

Client Sample ID: North Wall
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	803		2500	3355		mg/Kg		102	90 - 110		

Lab Sample ID: 880-32113-11 MSD
Matrix: Solid
Analysis Batch: 60617

Client Sample ID: North Wall
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	803		2500	3362		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

GC VOA

Analysis Batch: 60869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-1	Bottom Hole-1	Total/NA	Solid	8021B	60938
880-32113-2	Bottom Hole-2	Total/NA	Solid	8021B	60938
880-32113-3	Bottom Hole-3	Total/NA	Solid	8021B	60938
880-32113-4	Bottom Hole-4	Total/NA	Solid	8021B	60938
880-32113-5	Bottom Hole-5	Total/NA	Solid	8021B	60938
880-32113-6	Bottom Hole-6	Total/NA	Solid	8021B	60938
880-32113-7	Bottom Hole-7	Total/NA	Solid	8021B	60938
880-32113-8	Bottom Hole-8	Total/NA	Solid	8021B	60938
880-32113-9	Bottom Hole-9	Total/NA	Solid	8021B	60938
880-32113-10	Bottom Hole-10	Total/NA	Solid	8021B	60938
880-32113-11	North Wall	Total/NA	Solid	8021B	60871
880-32113-12	South Wall	Total/NA	Solid	8021B	60871
880-32113-13	East Wall	Total/NA	Solid	8021B	60871
880-32113-14	West Wall	Total/NA	Solid	8021B	60871
MB 880-60871/5-A	Method Blank	Total/NA	Solid	8021B	60871
MB 880-60938/5-A	Method Blank	Total/NA	Solid	8021B	60938
LCS 880-60871/1-A	Lab Control Sample	Total/NA	Solid	8021B	60871
LCS 880-60938/1-A	Lab Control Sample	Total/NA	Solid	8021B	60938
LCSD 880-60871/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	60871
LCSD 880-60938/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	60938
880-31986-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	60871
880-31986-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	60871
890-5106-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	60938
890-5106-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	60938

Prep Batch: 60871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-11	North Wall	Total/NA	Solid	5035	
880-32113-12	South Wall	Total/NA	Solid	5035	
880-32113-13	East Wall	Total/NA	Solid	5035	
880-32113-14	West Wall	Total/NA	Solid	5035	
MB 880-60871/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-60871/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-60871/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31986-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-31986-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 60938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-1	Bottom Hole-1	Total/NA	Solid	5035	
880-32113-2	Bottom Hole-2	Total/NA	Solid	5035	
880-32113-3	Bottom Hole-3	Total/NA	Solid	5035	
880-32113-4	Bottom Hole-4	Total/NA	Solid	5035	
880-32113-5	Bottom Hole-5	Total/NA	Solid	5035	
880-32113-6	Bottom Hole-6	Total/NA	Solid	5035	
880-32113-7	Bottom Hole-7	Total/NA	Solid	5035	
880-32113-8	Bottom Hole-8	Total/NA	Solid	5035	
880-32113-9	Bottom Hole-9	Total/NA	Solid	5035	
880-32113-10	Bottom Hole-10	Total/NA	Solid	5035	
MB 880-60938/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-60938/1-A	Lab Control Sample	Total/NA	Solid	5035	

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

GC VOA (Continued)

Prep Batch: 60938 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-60938/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5106-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-5106-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 60979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-1	Bottom Hole-1	Total/NA	Solid	Total BTEX	
880-32113-2	Bottom Hole-2	Total/NA	Solid	Total BTEX	
880-32113-3	Bottom Hole-3	Total/NA	Solid	Total BTEX	
880-32113-4	Bottom Hole-4	Total/NA	Solid	Total BTEX	
880-32113-5	Bottom Hole-5	Total/NA	Solid	Total BTEX	
880-32113-6	Bottom Hole-6	Total/NA	Solid	Total BTEX	
880-32113-7	Bottom Hole-7	Total/NA	Solid	Total BTEX	
880-32113-8	Bottom Hole-8	Total/NA	Solid	Total BTEX	
880-32113-9	Bottom Hole-9	Total/NA	Solid	Total BTEX	
880-32113-10	Bottom Hole-10	Total/NA	Solid	Total BTEX	
880-32113-11	North Wall	Total/NA	Solid	Total BTEX	
880-32113-12	South Wall	Total/NA	Solid	Total BTEX	
880-32113-13	East Wall	Total/NA	Solid	Total BTEX	
880-32113-14	West Wall	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 60741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-1	Bottom Hole-1	Total/NA	Solid	8015NM Prep	
880-32113-2	Bottom Hole-2	Total/NA	Solid	8015NM Prep	
880-32113-3	Bottom Hole-3	Total/NA	Solid	8015NM Prep	
880-32113-4	Bottom Hole-4	Total/NA	Solid	8015NM Prep	
880-32113-5	Bottom Hole-5	Total/NA	Solid	8015NM Prep	
880-32113-6	Bottom Hole-6	Total/NA	Solid	8015NM Prep	
880-32113-7	Bottom Hole-7	Total/NA	Solid	8015NM Prep	
880-32113-8	Bottom Hole-8	Total/NA	Solid	8015NM Prep	
880-32113-9	Bottom Hole-9	Total/NA	Solid	8015NM Prep	
880-32113-10	Bottom Hole-10	Total/NA	Solid	8015NM Prep	
880-32113-11	North Wall	Total/NA	Solid	8015NM Prep	
880-32113-12	South Wall	Total/NA	Solid	8015NM Prep	
880-32113-13	East Wall	Total/NA	Solid	8015NM Prep	
880-32113-14	West Wall	Total/NA	Solid	8015NM Prep	
MB 880-60741/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-60741/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-60741/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5126-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5126-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 60776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-1	Bottom Hole-1	Total/NA	Solid	8015B NM	60741
880-32113-2	Bottom Hole-2	Total/NA	Solid	8015B NM	60741
880-32113-3	Bottom Hole-3	Total/NA	Solid	8015B NM	60741
880-32113-4	Bottom Hole-4	Total/NA	Solid	8015B NM	60741

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

GC Semi VOA (Continued)

Analysis Batch: 60776 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-5	Bottom Hole-5	Total/NA	Solid	8015B NM	60741
880-32113-6	Bottom Hole-6	Total/NA	Solid	8015B NM	60741
880-32113-7	Bottom Hole-7	Total/NA	Solid	8015B NM	60741
880-32113-8	Bottom Hole-8	Total/NA	Solid	8015B NM	60741
880-32113-9	Bottom Hole-9	Total/NA	Solid	8015B NM	60741
880-32113-10	Bottom Hole-10	Total/NA	Solid	8015B NM	60741
880-32113-11	North Wall	Total/NA	Solid	8015B NM	60741
880-32113-12	South Wall	Total/NA	Solid	8015B NM	60741
880-32113-13	East Wall	Total/NA	Solid	8015B NM	60741
880-32113-14	West Wall	Total/NA	Solid	8015B NM	60741
MB 880-60741/1-A	Method Blank	Total/NA	Solid	8015B NM	60741
LCS 880-60741/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	60741
LCSD 880-60741/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	60741
890-5126-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	60741
890-5126-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	60741

Analysis Batch: 60897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-1	Bottom Hole-1	Total/NA	Solid	8015 NM	
880-32113-2	Bottom Hole-2	Total/NA	Solid	8015 NM	
880-32113-3	Bottom Hole-3	Total/NA	Solid	8015 NM	
880-32113-4	Bottom Hole-4	Total/NA	Solid	8015 NM	
880-32113-5	Bottom Hole-5	Total/NA	Solid	8015 NM	
880-32113-6	Bottom Hole-6	Total/NA	Solid	8015 NM	
880-32113-7	Bottom Hole-7	Total/NA	Solid	8015 NM	
880-32113-8	Bottom Hole-8	Total/NA	Solid	8015 NM	
880-32113-9	Bottom Hole-9	Total/NA	Solid	8015 NM	
880-32113-10	Bottom Hole-10	Total/NA	Solid	8015 NM	
880-32113-11	North Wall	Total/NA	Solid	8015 NM	
880-32113-12	South Wall	Total/NA	Solid	8015 NM	
880-32113-13	East Wall	Total/NA	Solid	8015 NM	
880-32113-14	West Wall	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 60360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-1	Bottom Hole-1	Soluble	Solid	DI Leach	
880-32113-2	Bottom Hole-2	Soluble	Solid	DI Leach	
880-32113-3	Bottom Hole-3	Soluble	Solid	DI Leach	
880-32113-4	Bottom Hole-4	Soluble	Solid	DI Leach	
880-32113-5	Bottom Hole-5	Soluble	Solid	DI Leach	
880-32113-6	Bottom Hole-6	Soluble	Solid	DI Leach	
880-32113-7	Bottom Hole-7	Soluble	Solid	DI Leach	
880-32113-8	Bottom Hole-8	Soluble	Solid	DI Leach	
880-32113-9	Bottom Hole-9	Soluble	Solid	DI Leach	
880-32113-10	Bottom Hole-10	Soluble	Solid	DI Leach	
880-32113-11	North Wall	Soluble	Solid	DI Leach	
880-32113-12	South Wall	Soluble	Solid	DI Leach	
880-32113-13	East Wall	Soluble	Solid	DI Leach	
880-32113-14	West Wall	Soluble	Solid	DI Leach	

QC Association Summary

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

HPLC/IC (Continued)

Leach Batch: 60360 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-60360/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-60360/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-60360/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-32113-1 MS	Bottom Hole-1	Soluble	Solid	DI Leach	
880-32113-1 MSD	Bottom Hole-1	Soluble	Solid	DI Leach	
880-32113-11 MS	North Wall	Soluble	Solid	DI Leach	
880-32113-11 MSD	North Wall	Soluble	Solid	DI Leach	

Analysis Batch: 60617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32113-1	Bottom Hole-1	Soluble	Solid	300.0	60360
880-32113-2	Bottom Hole-2	Soluble	Solid	300.0	60360
880-32113-3	Bottom Hole-3	Soluble	Solid	300.0	60360
880-32113-4	Bottom Hole-4	Soluble	Solid	300.0	60360
880-32113-5	Bottom Hole-5	Soluble	Solid	300.0	60360
880-32113-6	Bottom Hole-6	Soluble	Solid	300.0	60360
880-32113-7	Bottom Hole-7	Soluble	Solid	300.0	60360
880-32113-8	Bottom Hole-8	Soluble	Solid	300.0	60360
880-32113-9	Bottom Hole-9	Soluble	Solid	300.0	60360
880-32113-10	Bottom Hole-10	Soluble	Solid	300.0	60360
880-32113-11	North Wall	Soluble	Solid	300.0	60360
880-32113-12	South Wall	Soluble	Solid	300.0	60360
880-32113-13	East Wall	Soluble	Solid	300.0	60360
880-32113-14	West Wall	Soluble	Solid	300.0	60360
MB 880-60360/1-A	Method Blank	Soluble	Solid	300.0	60360
LCS 880-60360/2-A	Lab Control Sample	Soluble	Solid	300.0	60360
LCSD 880-60360/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	60360
880-32113-1 MS	Bottom Hole-1	Soluble	Solid	300.0	60360
880-32113-1 MSD	Bottom Hole-1	Soluble	Solid	300.0	60360
880-32113-11 MS	North Wall	Soluble	Solid	300.0	60360
880-32113-11 MSD	North Wall	Soluble	Solid	300.0	60360

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB
SDG: 1786

Client Sample ID: Bottom Hole-1
Lab Sample ID: 880-32113-1
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 03:32	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 14:06	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		5			60617	08/18/23 21:39	CH	EET MID

Client Sample ID: Bottom Hole-2
Lab Sample ID: 880-32113-2
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 03:52	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 14:29	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		10			60617	08/18/23 21:59	CH	EET MID

Client Sample ID: Bottom Hole-3
Lab Sample ID: 880-32113-3
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 04:13	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 14:50	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		5			60617	08/18/23 22:06	CH	EET MID

Client Sample ID: Bottom Hole-4
Lab Sample ID: 880-32113-4
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 04:33	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB
SDG: 1786

Client Sample ID: Bottom Hole-4
Lab Sample ID: 880-32113-4
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 15:12	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		10			60617	08/18/23 22:13	CH	EET MID

Client Sample ID: Bottom Hole-5
Lab Sample ID: 880-32113-5
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 04:53	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 15:55	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		10			60617	08/18/23 22:19	CH	EET MID

Client Sample ID: Bottom Hole-6
Lab Sample ID: 880-32113-6
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 05:14	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 16:17	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		5			60617	08/18/23 22:39	CH	EET MID

Client Sample ID: Bottom Hole-7
Lab Sample ID: 880-32113-7
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 05:34	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 16:39	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB
SDG: 1786

Client Sample ID: Bottom Hole-7
Lab Sample ID: 880-32113-7
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		10			60617	08/18/23 22:46	CH	EET MID

Client Sample ID: Bottom Hole-8
Lab Sample ID: 880-32113-8
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 05:55	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 17:00	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		5			60617	08/18/23 22:53	CH	EET MID

Client Sample ID: Bottom Hole-9
Lab Sample ID: 880-32113-9
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 06:15	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 17:22	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		10			60617	08/18/23 22:59	CH	EET MID

Client Sample ID: Bottom Hole-10
Lab Sample ID: 880-32113-10
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60938	08/23/23 17:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/24/23 06:36	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 17:44	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		5			60617	08/18/23 23:06	CH	EET MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB
SDG: 1786

Client Sample ID: North Wall
Lab Sample ID: 880-32113-11
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60871	08/23/23 08:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/23/23 18:19	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 18:05	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		10			60617	08/18/23 23:13	CH	EET MID

Client Sample ID: South Wall
Lab Sample ID: 880-32113-12
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60871	08/23/23 08:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/23/23 18:40	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 18:27	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		5			60617	08/18/23 23:33	CH	EET MID

Client Sample ID: East Wall
Lab Sample ID: 880-32113-13
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60871	08/23/23 08:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/23/23 19:00	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 18:49	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		10			60617	08/18/23 23:39	CH	EET MID

Client Sample ID: West Wall
Lab Sample ID: 880-32113-14
Date Collected: 08/11/23 14:53
Matrix: Solid
Date Received: 08/15/23 16:35

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	60871	08/23/23 08:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60869	08/23/23 19:21	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60979	08/24/23 10:35	SM	EET MID

Lab Chronicle

Client: Etech Environmental & Safety Solutions
Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB
SDG: 1786

Client Sample ID: West Wall
Lab Sample ID: 880-32113-14

Date Collected: 08/11/23 14:53
Matrix: Solid

Date Received: 08/15/23 16:35

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			60897	08/23/23 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	60741	08/21/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60776	08/22/23 19:11	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	60360	08/16/23 09:31	SMC	EET MID
Soluble	Analysis	300.0		10			60617	08/18/23 23:59	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Etech Environmental & Safety Solutions
Job ID: 880-32113-1
Project/Site: NM Hayhurst Section 35 CTB
SDG: 1786

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	T104704400-23-26	06-30-24

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: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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:

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

Sample Summary

Client: Etech Environmental & Safety Solutions
Project/Site: NM Hayhurst Section 35 CTB

Job ID: 880-32113-1
SDG: 1786

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-32113-1	Bottom Hole-1	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-2	Bottom Hole-2	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-3	Bottom Hole-3	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-4	Bottom Hole-4	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-5	Bottom Hole-5	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-6	Bottom Hole-6	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-7	Bottom Hole-7	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-8	Bottom Hole-8	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-9	Bottom Hole-9	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-10	Bottom Hole-10	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-11	North Wall	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-12	South Wall	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-13	East Wall	Solid	08/11/23 14:53	08/15/23 16:35
880-32113-14	West Wall	Solid	08/11/23 14:53	08/15/23 16:35

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: NM Hayhurst Section 35 CTB
Project #: 17586 Project Loc:
Area: PO#: 17586
☑ Bill Etech

880-32113 Chain of Custody

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

(lab use only) ORDER #: 32113

LAB # (lab use only)	FIELD CODE	Start Depth	End Depth	Date Sampled	Time Sampled	No. of Containers	Matrix	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	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
	Bottom Hole 1		12"	8-11-23	1453	1	S	☒	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☒	☐	☐	☒	☐	☒
	Bottom Hole 2		12"		1455	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Bottom Hole 3		6"		1457	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Bottom Hole 4		9"		1459	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Bottom Hole 5		6"		1502	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Bottom Hole 6		6"		1504	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Bottom Hole 7		6"		1506	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Bottom Hole 8		9"		1508	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Bottom Hole 9		6"		1510	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Bottom Hole 10		9"		1512	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	North wall	0	6"		1514	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	South wall	0	6"		1516	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	East wall	0	6"		1518	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	West wall	0	6"		1520	1		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Matrix: DW=Drinking Water SL=Sludge; GW = Groundwater S=Soil/Solid; NP=Non-PotableSpecify Other

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
	8/15/23	16:35		8/15/23	1635
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

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 of 5.3 °C

Login Sample Receipt Checklist

Client: Etech Environmental & Safety Solutions

Job Number: 880-32113-1
SDG Number: 1786

Login Number: 32113
List Number: 1
Creator: Teel, Brianna

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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.	True	
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").	True	

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

PBELAB

Analytical Report Rev. 1

Prepared for:

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

Project: NM Hayhurst Sect. 35 C TB
Project Number: 17586
Location: New Mexico

Lab Order Number: 4C25010

NELAP ACCREDITED TNI LABORATORY

Current Certification

Report Date: 05/10/24

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom Hole - 2A @ 12.5"	4C25010-01	Soil	03/22/24 12:00	03-25-2024 15:52
Bottom Hole - 4A @ 10"	4C25010-02	Soil	03/22/24 12:02	03-25-2024 15:52
Bottom Hole - 6A @ 8"	4C25010-03	Soil	03/22/24 12:04	03-25-2024 15:52
Bottom Hole - 7A @ 8"	4C25010-04	Soil	03/22/24 12:06	03-25-2024 15:52
Bottom Hole - 8A @ 12"	4C25010-05	Soil	03/22/24 12:08	03-25-2024 15:52
Bottom Hole - 9A @ 8"	4C25010-06	Soil	03/22/24 12:10	03-25-2024 15:52
Bottom Hole - 11A @ 8"	4C25010-07	Soil	03/22/24 12:12	03-25-2024 15:52
Bottom Hole 12A @ 8"	4C25010-08	Soil	03/22/24 12:14	03-25-2024 15:52
Bottom Hole - 13A @ 8"	4C25010-09	Soil	03/22/24 12:16	03-25-2024 15:52
Bottom Hole - 14A @ 8"	4C25010-10	Soil	03/22/24 12:18	03-25-2024 15:52
North Side Wall A @ 0-6"	4C25010-11	Soil	03/22/24 12:20	03-25-2024 15:52
South Side Wall A @ 0-6"	4C25010-12	Soil	03/22/24 12:22	03-25-2024 15:52
East Side Wall A @ 0-6"	4C25010-13	Soil	03/22/24 12:24	03-25-2024 15:52

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole - 2A @ 12.5''

4C25010-01 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 15:54	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 15:54	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 15:54	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 15:54	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 15:54	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	*101 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 15:54*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene	*89.0 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 15:54*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 03:49	TPH 8015M	
>C12-C28	**30.6**	25.8	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 03:49	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 03:49	TPH 8015M	
Surrogate: 1-Chlorooctane	*91.2 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 03:49*	*TPH 8015M*	
Surrogate: o-Terphenyl	*106 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 03:49*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**30.6**	25.8	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 03:49	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**170**	1.03	mg/kg dry	1	P4C2611	03/26/24 14:29	03/26/24 20:41	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole - 4A @ 10"

4C25010-02 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:16	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:16	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:16	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:16	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	*105 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 16:16*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene	*88.6 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 16:16*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 04:12	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 04:12	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 04:12	TPH 8015M	
Surrogate: 1-Chlorooctane	*95.5 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 04:12*	*TPH 8015M*	
Surrogate: o-Terphenyl	*110 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 04:12*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 04:12	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**75.4**	5.26	mg/kg dry	5	P4C2611	03/26/24 14:29	03/26/24 20:56	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole - 6A @ 8"

4C25010-03 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:39	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:39	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:39	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:39	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 16:39	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	*110 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 16:39*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene	*85.0 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 16:39*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.6	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 05:22	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 05:22	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 05:22	TPH 8015M	
Surrogate: 1-Chlorooctane	*97.2 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 05:22*	*TPH 8015M*	
Surrogate: o-Terphenyl	*113 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 05:22*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 05:22	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**111**	1.06	mg/kg dry	1	P4C2611	03/26/24 14:29	03/28/24 10:32	EPA 300.0	
% Moisture	**6.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole - 7A @ 8''

4C25010-04 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:01	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:01	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:01	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:01	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:01	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*86.5 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 17:01*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*109 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 17:01*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 05:45	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 05:45	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 05:45	TPH 8015M	
Surrogate: 1-Chlorooctane	*93.6 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 05:45*	*TPH 8015M*	
Surrogate: o-Terphenyl	*109 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 05:45*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 05:45	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**131**	1.05	mg/kg dry	1	P4C2611	03/26/24 14:29	03/28/24 10:49	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole - 8A @ 12"

4C25010-05 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:24	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:24	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:24	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:24	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:24	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	*107 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 17:24*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene	*88.4 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 17:24*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	27.5	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 06:09	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 06:09	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 06:09	TPH 8015M	
Surrogate: 1-Chlorooctane	*95.6 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 06:09*	*TPH 8015M*	
Surrogate: o-Terphenyl	*111 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 06:09*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 06:09	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**60.3**	5.49	mg/kg dry	5	P4C2611	03/26/24 14:29	03/26/24 21:42	EPA 300.0	
% Moisture	**9.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole - 9A @ 8"

4C25010-06 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:46	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:46	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:46	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:46	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 17:46	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*88.1 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 17:46*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*109 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 17:46*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 06:32	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 06:32	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 06:32	TPH 8015M	
Surrogate: 1-Chlorooctane	*89.1 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 06:32*	*TPH 8015M*	
Surrogate: o-Terphenyl	*102 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 06:32*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 06:32	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**132**	1.05	mg/kg dry	1	P4C2611	03/26/24 14:29	03/28/24 11:06	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole - 11A @ 8"

4C25010-07 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:08	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:08	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:08	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:08	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:08	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*87.3 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 18:08*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*108 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 18:08*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 06:55	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 06:55	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 06:55	TPH 8015M	
Surrogate: 1-Chlorooctane	*99.3 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 06:55*	*TPH 8015M*	
Surrogate: o-Terphenyl	*116 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 06:55*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 06:55	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**107**	1.05	mg/kg dry	1	P4C2611	03/26/24 14:29	03/28/24 11:22	EPA 300.0	
% Moisture	**5.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole 12A @ 8''

4C25010-08 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:30	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:30	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:30	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:30	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:30	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*87.8 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 18:30*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*112 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 18:30*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 07:19	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 07:19	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 07:19	TPH 8015M	
Surrogate: 1-Chlorooctane	*97.4 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 07:19*	*TPH 8015M*	
Surrogate: o-Terphenyl	*113 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 07:19*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 07:19	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**231**	1.04	mg/kg dry	1	P4C2611	03/26/24 14:29	03/28/24 11:39	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole - 13A @ 8"

4C25010-09 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:53	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:53	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:53	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:53	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 18:53	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*82.9 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 18:53*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*120 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 18:53*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.9	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 07:42	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 07:42	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 07:42	TPH 8015M	
Surrogate: 1-Chlorooctane	*96.4 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 07:42*	*TPH 8015M*	
Surrogate: o-Terphenyl	*112 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 07:42*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 07:42	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**4340**	10.8	mg/kg dry	10	P4C2613	03/26/24 15:25	03/27/24 00:01	EPA 300.0	
% Moisture	**7.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Bottom Hole - 14A @ 8"

4C25010-10 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 19:16	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 19:16	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 19:16	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 19:16	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 19:16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*86.8 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 19:16*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*110 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 19:16*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 08:05	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 08:05	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 08:05	TPH 8015M	
Surrogate: 1-Chlorooctane	*96.7 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 08:05*	*TPH 8015M*	
Surrogate: o-Terphenyl	*112 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 08:05*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 08:05	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**236**	10.4	mg/kg dry	10	P4C2613	03/26/24 15:25	03/27/24 00:47	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

North Side Wall A @ 0-6"

4C25010-11 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:24	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:24	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:24	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:24	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:24	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*87.5 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 20:24*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*110 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 20:24*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	25.8	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 08:28	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 08:28	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 08:28	TPH 8015M	
Surrogate: 1-Chlorooctane	*102 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 08:28*	*TPH 8015M*	
Surrogate: o-Terphenyl	*118 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 08:28*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 08:28	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**127**	1.03	mg/kg dry	1	P4C2613	03/26/24 15:25	03/28/24 11:56	EPA 300.0	
% Moisture	**3.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

South Side Wall A @ 0-6''

4C25010-12 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:46	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:46	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:46	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:46	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 20:46	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	*108 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 20:46*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene	*88.1 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 20:46*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	ND	26.0	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 08:51	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 08:51	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P4C2615	03/26/24 15:41	03/27/24 08:51	TPH 8015M	
Surrogate: 1-Chlorooctane	*98.5 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 08:51*	*TPH 8015M*	
Surrogate: o-Terphenyl	*115 %*		*70-130*		*P4C2615*	*03/26/24 15:41*	*03/27/24 08:51*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	03/26/24 15:41	03/27/24 08:51	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**91.8**	5.21	mg/kg dry	5	P4C2613	03/26/24 15:25	03/27/24 01:17	EPA 300.0	
% Moisture	**4.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

East Side Wall A @ 0-6"

4C25010-13 (Soil)

Permian Basin Environmental Lab, L.P.

Analyte	Result	Limit	Reporting Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 21:09	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 21:09	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 21:09	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 21:09	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P4C2610	03/26/24 13:05	03/26/24 21:09	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	*85.9 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 21:09*	*EPA 8021B*	
Surrogate: 4-Bromofluorobenzene	*108 %*		*80-120*		*P4C2610*	*03/26/24 13:05*	*03/26/24 21:09*	*EPA 8021B*	
Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M									
C6-C12	**26.5**	25.5	mg/kg dry	1	P4C2616	03/26/24 15:43	03/26/24 23:21	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P4C2616	03/26/24 15:43	03/26/24 23:21	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P4C2616	03/26/24 15:43	03/26/24 23:21	TPH 8015M	
Surrogate: 1-Chlorooctane	*113 %*		*70-130*		*P4C2616*	*03/26/24 15:43*	*03/26/24 23:21*	*TPH 8015M*	
Surrogate: o-Terphenyl	*105 %*		*70-130*		*P4C2616*	*03/26/24 15:43*	*03/26/24 23:21*	*TPH 8015M*	
Total Petroleum Hydrocarbon C6-C35	**26.5**	25.5	mg/kg dry	1	[CALC]	03/26/24 15:43	03/26/24 23:21	calc	
General Chemistry Parameters by EPA / Standard Methods									
Chloride	**282**	5.10	mg/kg dry	5	P4C2613	03/26/24 15:25	03/27/24 01:32	EPA 300.0	
% Moisture	**2.0**	0.1	%	1	P4C2709	03/27/24 10:08	03/27/24 10:12	ASTM D2216	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
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 P4C2610 - * DEFAULT PREP *** **										
Blank (P4C2610-BLK1)				Prepared & Analyzed: 03/26/24						
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	*0.105*		*"*	*0.120*		*87.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.119*		*"*	*0.120*		*99.5*	*80-120*			
LCS (P4C2610-BS1)				Prepared & Analyzed: 03/26/24						
Benzene	0.0911	0.00100	mg/kg	0.100		91.1	80-120			
Toluene	0.0816	0.00100	"	0.100		81.6	80-120			
Ethylbenzene	0.0924	0.00100	"	0.100		92.4	80-120			
Xylene (p/m)	0.196	0.00200	"	0.200		98.0	80-120			
Xylene (o)	0.0844	0.00100	"	0.100		84.4	80-120			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.3*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.122*		*"*	*0.120*		*102*	*80-120*			
LCS Dup (P4C2610-BSD1)				Prepared & Analyzed: 03/26/24						
Benzene	0.0939	0.00100	mg/kg	0.100		93.9	80-120	2.98	20	
Toluene	0.0864	0.00100	"	0.100		86.4	80-120	5.63	20	
Ethylbenzene	0.0982	0.00100	"	0.100		98.2	80-120	6.09	20	
Xylene (p/m)	0.208	0.00200	"	0.200		104	80-120	5.91	20	
Xylene (o)	0.0913	0.00100	"	0.100		91.3	80-120	7.88	20	
Surrogate: 1,4-Difluorobenzene	*0.110*		*"*	*0.120*		*91.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.126*		*"*	*0.120*		*105*	*80-120*			
Calibration Blank (P4C2610-CCB1)				Prepared & Analyzed: 03/26/24						
Benzene	0.180		ug/kg							
Toluene	0.240		"							
Ethylbenzene	0.110		"							
Xylene (p/m)	0.140		"							
Xylene (o)	0.100		"							
Surrogate: 1,4-Difluorobenzene	*0.107*		*"*	*0.120*		*89.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.126*		*"*	*0.120*		*105*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
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 P4C2610 - * DEFAULT PREP *** **										
Calibration Blank (P4C2610-CCB2)				Prepared & Analyzed: 03/26/24						
Benzene	0.270		ug/kg							
Toluene	0.370		"							
Ethylbenzene	0.240		"							
Xylene (p/m)	0.210		"							
Xylene (o)	0.210		"							
Surrogate: 1,4-Difluorobenzene	*0.101*		*"*	*0.120*		*84.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*0.130*		*"*	*0.120*		*108*	*80-120*			
Calibration Check (P4C2610-CCV1)				Prepared & Analyzed: 03/26/24						
Benzene	0.0952	0.00100	mg/kg	0.100		95.2	80-120			
Toluene	0.0840	0.00100	"	0.100		84.0	80-120			
Ethylbenzene	0.0889	0.00100	"	0.100		88.9	80-120			
Xylene (p/m)	0.201	0.00200	"	0.200		101	80-120			
Xylene (o)	0.0876	0.00100	"	0.100		87.6	80-120			
Surrogate: 1,4-Difluorobenzene	*0.116*		*"*	*0.120*		*96.6*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.121*		*"*	*0.120*		*101*	*75-125*			
Calibration Check (P4C2610-CCV2)				Prepared & Analyzed: 03/26/24						
Benzene	0.105	0.00100	mg/kg	0.100		105	80-120			
Toluene	0.0935	0.00100	"	0.100		93.5	80-120			
Ethylbenzene	0.100	0.00100	"	0.100		100	80-120			
Xylene (p/m)	0.227	0.00200	"	0.200		114	80-120			
Xylene (o)	0.100	0.00100	"	0.100		100	80-120			
Surrogate: 1,4-Difluorobenzene	*0.110*		*"*	*0.120*		*91.5*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.123*		*"*	*0.120*		*103*	*75-125*			
Calibration Check (P4C2610-CCV3)				Prepared: 03/26/24 Analyzed: 03/27/24						
Benzene	0.113	0.00100	mg/kg	0.100		113	80-120			
Toluene	0.0980	0.00100	"	0.100		98.0	80-120			
Ethylbenzene	0.103	0.00100	"	0.100		103	80-120			
Xylene (p/m)	0.232	0.00200	"	0.200		116	80-120			
Xylene (o)	0.102	0.00100	"	0.100		102	80-120			
Surrogate: 1,4-Difluorobenzene	*0.114*		*"*	*0.120*		*94.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*0.119*		*"*	*0.120*		*99.6*	*75-125*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
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 P4C2610 - * DEFAULT PREP *** **										
Matrix Spike (P4C2610-MS1)	**Source: 4C25010-01**			Prepared: 03/26/24 Analyzed: 03/27/24						
Benzene	0.0837	0.00103	mg/kg dry	0.103	ND	81.2	80-120			
Toluene	0.0726	0.00103	"	0.103	ND	70.4	80-120			QM-05
Ethylbenzene	0.0789	0.00103	"	0.103	ND	76.5	80-120			QM-05
Xylene (p/m)	0.170	0.00206	"	0.206	ND	82.4	80-120			
Xylene (o)	0.0712	0.00103	"	0.103	ND	69.0	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	*0.126*		"	*0.124*		*102*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.116*		"	*0.124*		*93.6*	*80-120*			
Matrix Spike Dup (P4C2610-MSD1)	**Source: 4C25010-01**			Prepared: 03/26/24 Analyzed: 03/27/24						
Benzene	0.0927	0.00103	mg/kg dry	0.103	ND	89.9	80-120	10.2	20	
Toluene	0.0824	0.00103	"	0.103	ND	79.9	80-120	12.7	20	QM-05
Ethylbenzene	0.0905	0.00103	"	0.103	ND	87.8	80-120	13.8	20	
Xylene (p/m)	0.199	0.00206	"	0.206	ND	96.7	80-120	16.0	20	
Xylene (o)	0.0849	0.00103	"	0.103	ND	82.3	80-120	17.6	20	
Surrogate: 4-Bromofluorobenzene	*0.129*		"	*0.124*		*104*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*0.114*		"	*0.124*		*92.0*	*80-120*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
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 P4C2615 - TX 1005										
Blank (P4C2615-BLK1)				Prepared & Analyzed: 03/26/24						
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*93.2*		*"*	*100*		*93.2*	*70-130*			
Surrogate: o-Terphenyl	*53.9*		*"*	*50.0*		*108*	*70-130*			
LCS (P4C2615-BS1)				Prepared & Analyzed: 03/26/24						
C6-C12	822	25.0	mg/kg	1000		82.2	75-125			
>C12-C28	858	25.0	"	1000		85.8	75-125			
Surrogate: 1-Chlorooctane	*107*		*"*	*100*		*107*	*70-130*			
Surrogate: o-Terphenyl	*49.3*		*"*	*50.0*		*98.7*	*70-130*			
LCS Dup (P4C2615-BSD1)				Prepared & Analyzed: 03/26/24						
C6-C12	830	25.0	mg/kg	1000		83.0	75-125	0.931	20	
>C12-C28	853	25.0	"	1000		85.3	75-125	0.623	20	
Surrogate: 1-Chlorooctane	*106*		*"*	*100*		*106*	*70-130*			
Surrogate: o-Terphenyl	*50.5*		*"*	*50.0*		*101*	*70-130*			
Calibration Check (P4C2615-CCV1)				Prepared & Analyzed: 03/26/24						
C6-C12	536	25.0	mg/kg	500		107	85-115			
>C12-C28	570	25.0	"	500		114	85-115			
Surrogate: 1-Chlorooctane	*107*		*"*	*100*		*107*	*70-130*			
Surrogate: o-Terphenyl	*56.2*		*"*	*50.0*		*112*	*70-130*			
Calibration Check (P4C2615-CCV2)				Prepared: 03/26/24 Analyzed: 03/27/24						
C6-C12	525	25.0	mg/kg	500		105	85-115			
>C12-C28	572	25.0	"	500		114	85-115			
Surrogate: 1-Chlorooctane	*105*		*"*	*100*		*105*	*70-130*			
Surrogate: o-Terphenyl	*55.0*		*"*	*50.0*		*110*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
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 P4C2615 - TX 1005										
Calibration Check (P4C2615-CCV3)				Prepared: 03/26/24 Analyzed: 03/27/24						
C6-C12	562	25.0	mg/kg	500		112	85-115			
>C12-C28	566	25.0	"	500		113	85-115			
Surrogate: 1-Chlorooctane	*113*		*"*	*100*		*113*	*70-130*			
Surrogate: o-Terphenyl	*58.7*		*"*	*50.0*		*117*	*70-130*			
Batch P4C2616 - TX 1005										
Blank (P4C2616-BLK1)				Prepared & Analyzed: 03/26/24						
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	*119*		*"*	*100*		*119*	*70-130*			
Surrogate: o-Terphenyl	*54.5*		*"*	*50.0*		*109*	*70-130*			
LCS (P4C2616-BS1)				Prepared & Analyzed: 03/26/24						
C6-C12	854	25.0	mg/kg	1000		85.4	75-125			
>C12-C28	785	25.0	"	1000		78.5	75-125			
Surrogate: 1-Chlorooctane	*122*		*"*	*100*		*122*	*70-130*			
Surrogate: o-Terphenyl	*52.8*		*"*	*50.0*		*106*	*70-130*			
LCS Dup (P4C2616-BSD1)				Prepared & Analyzed: 03/26/24						
C6-C12	818	25.0	mg/kg	1000		81.8	75-125	4.33	20	
>C12-C28	788	25.0	"	1000		78.8	75-125	0.351	20	
Surrogate: 1-Chlorooctane	*115*		*"*	*100*		*115*	*70-130*			
Surrogate: o-Terphenyl	*50.8*		*"*	*50.0*		*102*	*70-130*			
Calibration Check (P4C2616-CCV1)				Prepared & Analyzed: 03/26/24						
C6-C12	533	25.0	mg/kg	500		107	85-115			
>C12-C28	513	25.0	"	500		103	85-115			
Surrogate: 1-Chlorooctane	*126*		*"*	*100*		*126*	*70-130*			
Surrogate: o-Terphenyl	*56.7*		*"*	*50.0*		*113*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
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 P4C2616 - TX 1005										
Calibration Check (P4C2616-CCV2)				Prepared: 03/26/24 Analyzed: 03/27/24						
C6-C12	521	25.0	mg/kg	500		104	85-115			
>C12-C28	504	25.0	"	500		101	85-115			
Surrogate: 1-Chlorooctane	*119*		*"*	*100*		*119*	*70-130*			
Surrogate: o-Terphenyl	*54.4*		*"*	*50.0*		*109*	*70-130*			
Calibration Check (P4C2616-CCV3)				Prepared: 03/26/24 Analyzed: 03/27/24						
C6-C12	506	25.0	mg/kg	500		101	85-115			
>C12-C28	485	25.0	"	500		97.0	85-115			
Surrogate: 1-Chlorooctane	*111*		*"*	*100*		*111*	*70-130*			
Surrogate: o-Terphenyl	*52.5*		*"*	*50.0*		*105*	*70-130*			

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
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 P4C2611 - * DEFAULT PREP *** **										
Blank (P4C2611-BLK1)				Prepared & Analyzed: 03/26/24						
Chloride	ND	1.00	mg/kg							
LCS (P4C2611-BS1)				Prepared & Analyzed: 03/26/24						
Chloride	16.5		mg/kg	18.0		91.5	90-110			
Calibration Check (P4C2611-CCV1)				Prepared & Analyzed: 03/26/24						
Chloride	17.1		mg/kg	18.0		94.8	90-110			
Calibration Check (P4C2611-CCV2)				Prepared & Analyzed: 03/26/24						
Chloride	17.3		mg/kg	18.0		96.0	90-110			
Matrix Spike (P4C2611-MS1)		**Source: 4C20018-07**		Prepared & Analyzed: 03/26/24						
Chloride	102		mg/kg	100	-0.100	102	80-120			
Matrix Spike (P4C2611-MS2)		**Source: 4C25008-02**		Prepared & Analyzed: 03/26/24						
Chloride	105		mg/kg	100	5.62	99.2	80-120			
Matrix Spike Dup (P4C2611-MSD1)		**Source: 4C20018-07**		Prepared & Analyzed: 03/26/24						
Chloride	101		mg/kg	100	-0.100	101	80-120	0.953	20	
Matrix Spike Dup (P4C2611-MSD2)		**Source: 4C25008-02**		Prepared & Analyzed: 03/26/24						
Chloride	104		mg/kg	100	5.62	98.9	80-120	0.326	20	
Batch P4C2613 - * DEFAULT PREP *** **										
Blank (P4C2613-BLK1)				Prepared & Analyzed: 03/26/24						
Chloride	ND	1.00	mg/kg							

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
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 P4C2613 - * DEFAULT PREP *** **										
LCS (P4C2613-BS1)				Prepared & Analyzed: 03/26/24						
Chloride	16.9		mg/kg	18.0		93.8	90-110			
LCS Dup (P4C2613-BSD1)				Prepared & Analyzed: 03/26/24						
Chloride	17.3		mg/kg	18.0		95.9	90-110	2.17	10	
Calibration Check (P4C2613-CCV1)				Prepared & Analyzed: 03/26/24						
Chloride	17.6		mg/kg	18.0		97.9	90-110			
Calibration Check (P4C2613-CCV2)				Prepared: 03/26/24 Analyzed: 03/27/24						
Chloride	17.7		mg/kg	18.0		98.4	90-110			
Matrix Spike (P4C2613-MS1)		**Source: 4C25010-09**		Prepared: 03/26/24 Analyzed: 03/27/24						
Chloride	121		mg/kg	100	40.4	80.6	80-120			
Matrix Spike (P4C2613-MS2)		**Source: 4C26016-06**		Prepared: 03/26/24 Analyzed: 03/27/24						
Chloride	93.8		mg/kg	100	-0.103	93.8	80-120			
Matrix Spike Dup (P4C2613-MSD1)		**Source: 4C25010-09**		Prepared: 03/26/24 Analyzed: 03/27/24						
Chloride	125		mg/kg	100	40.4	84.2	80-120	2.95	20	
Matrix Spike Dup (P4C2613-MSD2)		**Source: 4C26016-06**		Prepared: 03/26/24 Analyzed: 03/27/24						
Chloride	96.1		mg/kg	100	-0.103	96.1	80-120	2.43	20	
Batch P4C2709 - * DEFAULT PREP *** **										
Blank (P4C2709-BLK1)				Prepared & Analyzed: 03/27/24						
% Moisture	ND	0.1	%							

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
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 P4C2709 - * DEFAULT PREP *** **										
Blank (P4C2709-BLK2)				Prepared & Analyzed: 03/27/24						
% Moisture	ND	0.1	%							
Duplicate (P4C2709-DUP1)		**Source: 4C25010-02**		Prepared & Analyzed: 03/27/24						
% Moisture	6.0	0.1	%		5.0			18.2	20	
Duplicate (P4C2709-DUP2)		**Source: 4C25010-12**		Prepared & Analyzed: 03/27/24						
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P4C2709-DUP3)		**Source: 4C26016-14**		Prepared & Analyzed: 03/27/24						
% Moisture	3.0	0.1	%		3.0			0.00	20	

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

Notes and Definitions

ROI	Received on Ice
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: 5/10/2024

Brent Barron, Laboratory Director/Technical Director

E Tech Environmental & Safety Solutions, Inc. [1]	Project: NM Hayhurst Sect. 35 C TB
13000 West County Road 100	Project Number: 17586
Odessa TX, 79765	Project Manager: Blake Estep

PBELAB

4C25010

Chain of Custody

Work Order No: PAT

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)
www.xenco.com

Project Manager:	Blake Estep	Bill to: (if different)	
Company Name:	Etech Environmental	Company Name:	
Address:	13000 West CR 100	Address:	
City, State ZIP:	Midland, TX 79711	City, State ZIP:	
Phone:	(432)563-2200	Email:	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:	NM Hayhurst Sec. 35 C TB	Turn Around	
Project Number:	17586	Routine	✓
P.O. Number:	17586	Rush:	
Sampler's Name:	Arturo Pelgado	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	03.2	Thermometer ID	
Received Intact:	(Yes) No		13
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	NCF
Sample Custody Seals:	(Yes) No N/A	Total Containers:	13

ANALYSIS REQUEST

Work Order Notes

Bill Etech

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chloride (E300)	TPH (TX1005) (8015M)	BTEX (8021B)	Sample Comments
Bottom Hole-2-A	S	3-22-24	1200	12"	1	X	X	X	1
Bottom Hole-4A	S		1202	10"	1				2
Bottom Hole-6A	S		1204	8"	1				3
Bottom Hole-7A	S		1206	8"	1				4
Bottom Hole-8A	S		1208	12"	1				5
Bottom Hole-9A	S		1210	8"	1				6
Bottom Hole-11A	S		1212	8"	1				7
Bottom Hole-12A	S		1214	8"	1				8
Bottom Hole-13A	S		1216	8"	1				9
Bottom Hole-14A	S		1218	8"	1				10

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	Myra Bledsoe	3/25/24 15:52	2		
3			4		
5			6		

PBELAB

4C25010

Chain of Custody

Work Order No: PAT

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)
www.xenco.com

Project Manager:	Blake Estep	Bill to: (if different)	
Company Name:	Etech Environmental	Company Name:	
Address:	13000 West CR 100	Address:	
City, State ZIP:	Midland, TX 79711	City, State ZIP:	
Phone:	(432)563-2200	Email:	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:	NM Hayhurst Sec. 35 CTB	Turn Around	
Project Number:	17586	Routine	☑
P.O. Number:	17586	Rush:	
Sampler's Name:	Arturo Delgado	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	03.2	Thermometer ID		
Received Intact:	(Yes) No		LB	
Cooler Custody Seals:	Yes .No (N/A)	Correction Factor:	NCF	
Sample Custody Seals:	(Yes) No N/A	Total Containers:	13	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chloride (E300)	TPH (TX1006) 8015M	BTEX 8021B	Sample Comments
North Side wall A	S	3-22-24	1220	0-6"	1	X	X	X	11
South Side wall A	S	11	1222	0-6"	1	/	/	/	12
East Side wall A	S	11	1224	0-6"	1	/	/	/	13

Work Order Notes

Bill Etech

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	Thumbtack	3/25/24 15:52	2		
3			4		
5			6		

PBELAB

DOC #: PBEL_REV_SUBMISSION
REVISION #: PBEL_2021_1
REVISION Date: 10/29/2021
EFFECTIVE DATE: 10/29/2021

REVISION/SUBMISSION FORM

Please fill in the required fields below with any requested revisions. In the event that there are multiple workorders or projects to be amended each workorder or project MUST have a separate form filled out entirely. An amended COC must be submitted in addition to the Revision/Submission Form in order for the amendments to be processed. Amended COC's do not replace the requirement of this form. If a revision is required due to errors or omissions on our part this form is still required for the necessary Non-Conformance documentation. Rerun requests will incur additional charges.

Client: eTech Environmental

Project: 4C25010

Revision Request:

Please revise the depth of Sample 2A from 12" to 12.5".

Submitted by (Name and Date): Blake Estep 05/10/2024

APPENDIX F

Correspondence & Notifications

Abe Valladares

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Monday, August 7, 2023 10:45 AM
To: Blake Estep
Cc: Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD
Subject: RE: [EXTERNAL] Soil Sampling Activities

Hi Blake,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Administrative Permitting Program
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Blake Estep <blake@etechenv.com>
Sent: Monday, August 7, 2023 9:12 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Soil Sampling Activities

Good morning,

Chevron anticipates conducting soil sampling activities at the following sites between August 10 & 11, 2023:

Site Name: Hayhurst NM Section 26 Dignitas SWD
Incident Number: nAPP2301837404

Site Name: Hayhurst NM Section 35 CTB
Incident Number: nAPP2302742810

Thank you,

Blake Estep

Etech Environmental & Safety Solutions, Inc.
P.O. Box 62228
Midland, Texas 79711
Phone: 432-563-2200
Mobile: 432-894-6038
Fax: 432-563-2213

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QUESTIONS

Action 324933

QUESTIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 324933
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2302742810**
Incident Name	**NAPP2302742810 HAYHURST NM SECTION 35 CTB @ 0**
Incident Type	**Oil Release**
Incident Status	**Initial C-141 Approved**
Incident Facility	**[fAPP2131342791] Hayhurst NM Section 35 CTB**

Location of Release Source	
Site Name	**HAYHURST NM SECTION 35 CTB**
Date Release Discovered	**01/12/2023**
Surface Owner	**Federal**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	1,863
What is the estimated number of samples that will be gathered	13
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/22/2024
Time sampling will commence	08:30 AM
Please provide any information necessary for observers to contact samplers	Blake Estep at 432-894-6038
Please provide any information necessary for navigation to sampling site	From the intersection of Whites City Road & CR 775, travel E for 0.03 miles. Turn N, travel 0.76 miles. Turn E, travel 1.86 miles. Turn NW, travel 0.09 miles to the GPS coordinates (32.091991, -104.152622)

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CONDITIONS

Action 324933

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 324933
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
abarnhill	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	3/20/2024

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QUESTIONS

Action 351250

QUESTIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 351250
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2302742810**
Incident Name	**NAPP2302742810 HAYHURST NM SECTION 35 CTB @ 0**
Incident Type	**Oil Release**
Incident Status	**Remediation Plan Received**
Incident Facility	**[fAPP2131342791] Hayhurst NM Section 35 CTB**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	HAYHURST NM SECTION 35 CTB
Date Release Discovered	01/12/2023
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Equipment Failure | Tank (Any) | Crude Oil | Released: 6 BBL | Recovered: 5 BBL | Lost: 1 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	*Not answered.*
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 351250
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**No**
Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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.

I hereby agree and sign off to the above statement	Name: Amy Barnhill Title: Waste & Water Specialist Email: ABarnhill@chevron.com Date: 06/06/2024

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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 351250
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	4340
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	11100
GRO+DRO (EPA SW-846 Method 8015M)	10850
BTEX (EPA SW-846 Method 8021B or 8260B)	33
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	08/11/2023
On what date will (or did) the final sampling or liner inspection occur	03/22/2024
On what date will (or was) the remediation complete(d)	12/31/2024
What is the estimated surface area (in square feet) that will be reclaimed	1861
What is the estimated volume (in cubic yards) that will be reclaimed	69
What is the estimated surface area (in square feet) that will be remediated	200
What is the estimated volume (in cubic yards) that will be remediated	11
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 351250
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	CENTRALIZED SURFACE WASTE MANAGEMENT FACILITY [fEEM0421141609]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Amy Barnhill Title: Waste & Water Specialist Email: ABarnhill@chevron.com Date: 06/06/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 351250
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 351250
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**324933**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**03/22/2024**
What was the (estimated) number of samples that were to be gathered	**13**
What was the sampling surface area in square feet	**1863**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 351250

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 351250
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	6/17/2024