

July 20, 2022

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

Re: Soil Remediation Workplan

Chevron USA

Benson Shugart Waterflood Unit #3 CTB Release (nAPP2216550022)

GPS: N 32.71331° W 103.91948°

Unit Letter "J", Section 26, Township 18 South, Range 30 East

Eddy County, New Mexico

Dear Mr. Hamlet,

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Chevron USA (Chevron), has prepared this Soil Remediation Workplan for the Benson Shugart Waterflood Unit #3 CTB Release Site (Release Site). The legal description of the Release Site is Unit Letter "J", Section 26, Township 18 South, Range 30 East, in Eddy County, New Mexico. The GPS coordinates for the site are N 32.71331° W 103.91948°. A Site Location Map and Aerial Proximity Map are provided as Figure 1 and Figure 2, respectively.

#### INTRODUCTION

On June 9, 2022, a reportable release occurred at the Release Site. The release was the result of a pin hole in the bottom of a heater treater and impacted the caliche production pad within the containment area. Approximately eleven and three-quarter (11.75) barrels (bbls) of crude oil and twenty-three and nine-tenths (23.9) of produced water was released with approximately nine and six-tenths (9.6) bbls of crude oil recovered via vacuum trucks, for a net loss of two and fifteen-hundredths (2.15) bbls of crude oil and twenty-three and nine-tenths (23.9) bbls of produced water. The initial Form C-141 is provided in Appendix A.

#### NMOCD SITE CLASSIFICATION

NMOCD assessment and cleanup levels for hydrocarbon and produced water releases are based on depth to groundwater and karst status and follow the criteria in the revised August 2018 Title 19 Chapter 15 part 29 New Mexico Administrative Code (19.15.29 NMAC) regulations. Groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE), New Mexico Bureau of Geology & Mineral Resources (NMBGMR), and United States Geological Survey (USGS) were accessed to determine if any registered water wells were located within a half-mile of the site. The databases identified no registered water wells within a ½-mile radius. No water wells were located within one thousand (1,000) ft of the release. The two closest water wells of the site were USGS 324244103561601 (1.07 miles west) & 324241103561201 (1.07 miles west) with depths ranging from one hundred eighty-four (184) ft below ground surface (bgs) to two hundred five (205) ft bgs for an average depth of one hundred ninety-five (195) ft bgs. In addition, the site is listed as being in a medium Karst Topography region. See Appendix B for maps, along with water well data, detailing the site relative to groundwater locations. Based on the NMOCD site classification system, the following soil remediation levels were assigned to the Release Site:

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

#### INITIAL ASSESSMENT AND DELINEATION ACTIVITIES

On June 28, 2022, Etech was onsite to perform the initial assessment and delineation of the release. The release, located on Bureau of Land Management (BLM) property, measured approximately forty-six (46) feet (ft) in length and twenty-one (21) ft wide within the bermed containment. The surface dimensions covered an area of approximately 966 square feet. Four (4) auger holes (Bottom Hole 1 through Bottom Hole 4) were installed in the spill area to depths ranging from six (6) inches bgs to forty-eight (48) inches bgs. Refusal was encountered at twelve (12) inches bgs in Bottom Hole 2, twelve (12) inches bgs in Bottom Hole 3, and six (6) inches bgs in Bottom Hole 4. Samples were collected and submitted to Europhins Laboratory in Midland, Texas for analysis of Benzene, Toulene, Ethylbenzene, and Xylenes (BTEX) by EPA method 8021B, Total Petroleum Hydrocarbons (TPH) by EPA method 8015M, and Chlorides by EPA method 300.0. Analytical concentrations for Benzene, Total BTEX, TPH, and/or chloride were above method detection limit (MDL) and/or the New Mexico Oil Conservation Division (NMOCD) remediation standards in Bottom Hole 1 (BH-1) in intervals 0-6" and 6-12", Bottom Hole 2 (AH-2) in interval 0-6", Bottom Hole 3 (BH-3) in intervals 0-6" and 6-12", and Bottom Hole 4 (BH-4) in interval 0-6". The chlorides were not delineated in Bottom Hole 2, 3, or 4. In addition, TPH was not delineated in Bottom Holes 2, 3, or 4. BTEX was fully delineated in all borings. See Table 1 for analytical results. See Appendix C for attached photos detailing release and impact to pad. See Figure 3 for Delineation Plat.

#### SOIL DELINEATION AND REMEDIATION WORKPLAN

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

- Impacted soils will be excavated to appropriate depths based on delineation data and stockpiled on plastic awaiting disposal.
- During excavation activities soils will be field screened utilizing chloride test kits and a PID meter for determination of laboratory sampling and additional excavation, if warranted.
- Upon completion of the excavation, confirmation soil samples will be collected every two hundred (200) square feet from the base and sidewalls (representing no more than 50 linear feet) of the excavated areas. Additional, discrete grab samples will be collected from wet or visibly stained areas inferred to have been affected by the release, as necessary. Samples will be submitted to Permian Basin Environmental Labs of Texas (PBELAB) for analysis of BTEX by EPA Method 8021B, TPH by EPA Method 8015M, and Chlorides by EPA method 300.0.
- The impacted soils will be transported off-site for disposal at an NMOCD approved disposal facilty. Estimated 60 cubic yards of impacted soils based on delineation results.
- Upon completion of additional delineation/remediation and requisite soil sampling, the site will be backfilled with locally sourced, non-impacted "like" material from an approved off-site facility and brought back to grade.
- A closure report with final C-141 will be submitted to the NMOCD upon completion of remediation activities.

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

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

Thank you,

Jeffrey Kindley, P.G.

Hy Kndly

Senior Project Manager/Geologist

Etech Environmental & Safety Solutions, Inc.

#### **Attachments:**

Figure 1 – Topographic Map

Figure 2 – Aerial Proximity Map

Figure 3 – Delineation Plat

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

Appendix A: Initial Release Notification and Corrective Action Form C-141

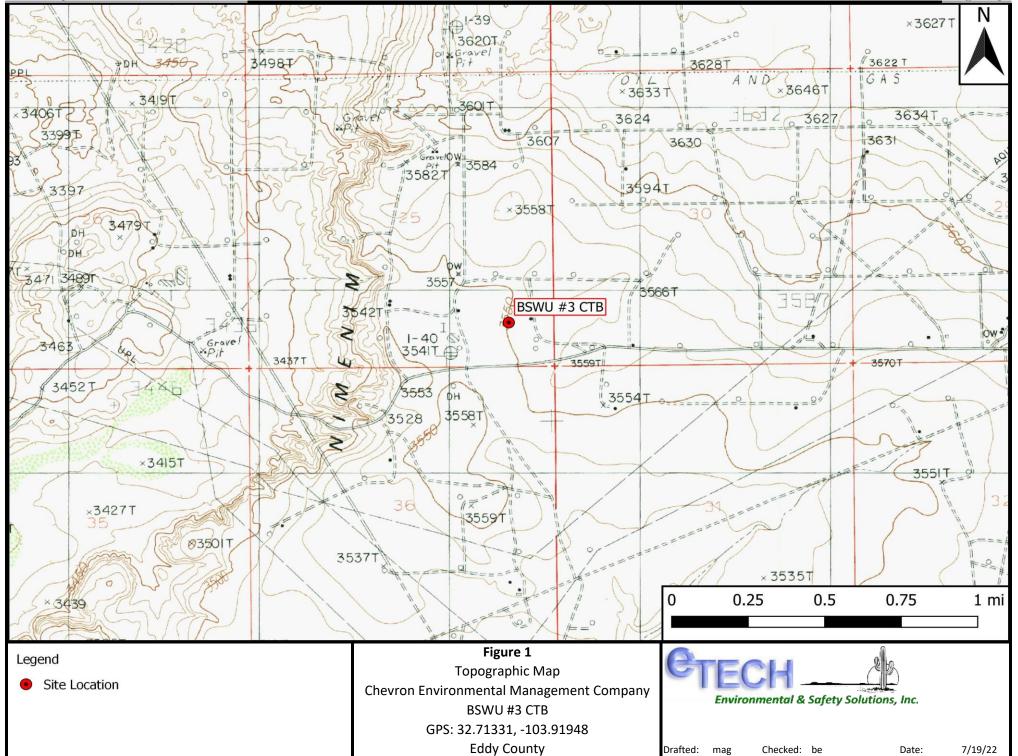
Appendix B: Groundwater Data Maps and Supporting Water Well Data

Appendix C: Photographic Documentation

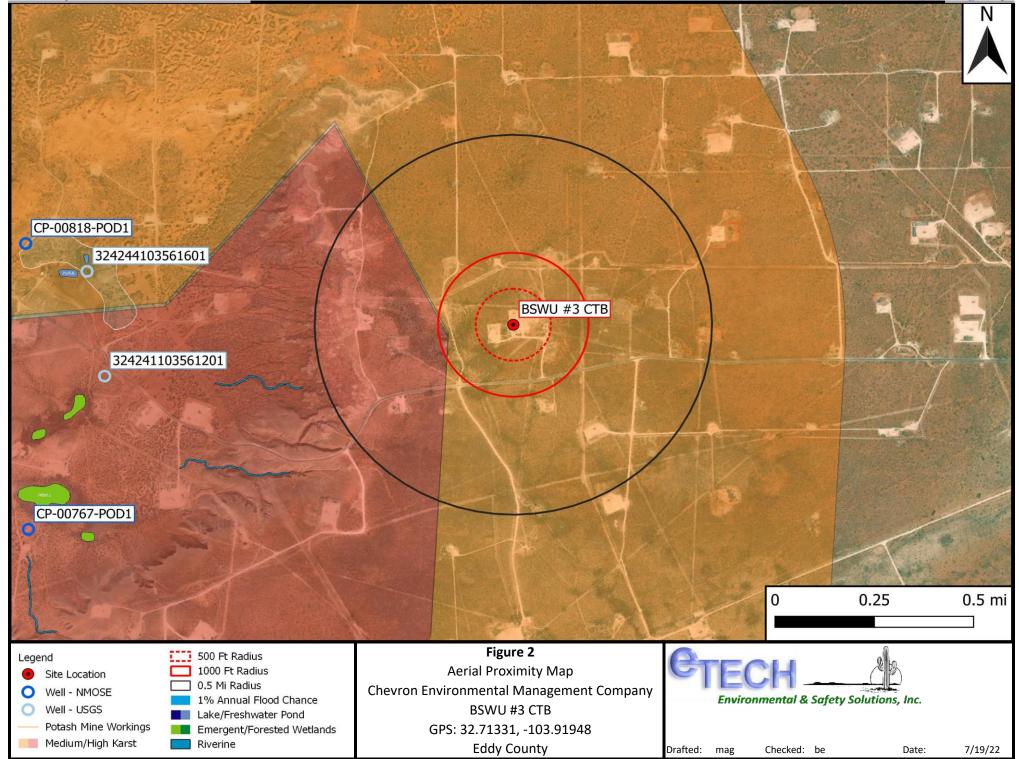
Appendix D: Laboratory Analytical

cc: File

# Figure 1 Topographic Map



# Figure 2 Aerial Proximity Map



# Figure 3 Delineation Plat



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

	Table 1										
Concentrations of BTEX, TPH, and Chloride in Soil											
			Chev	ron Envir	onmental	Managem	ent Comp	any			
					BSWU #	3 CTB					
				NMOCI	D Ref. #: n	APP2216	550022				
NMO	CD Closure C	riteria		10	50	-	-	-	-	100	600
NMOCD	Reclamation	Standard		10	50	-	-	-	-	100	600
				SW 840	6 8021B		SW	846 8015M	Ext.		4500 Cl
Sample ID	Date	Depth (Feet)	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C <sub>6</sub> -C <sub>10</sub> (mg/kg)	DRO C <sub>10</sub> -C <sub>28</sub> (mg/kg)	GRO + DRO C <sub>6</sub> -C <sub>28</sub> (mg/kg)	ORO C <sub>28</sub> -C <sub>36</sub> (mg/kg)	TPH C <sub>6</sub> -C <sub>36</sub> (mg/kg)	Chloride (mg/kg)
Bottom Hole 1 @ 0-6"	6/28/2022	0-0.5	In-Situ	0.336	92.0	1,570	2,080	3,650	<250	3,650	4,390
Bottom Hole 1 @ 6-12"	6/28/2022	0.5-1	In-Situ	0.368	163	3,780	3,600	7,380	<250	7,380	896
Bottom Hole 1 @ 18-24"	6/28/2022	1.5-2	In-Situ	< 0.00199	0.00892	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	48.7
Bottom Hole 1 @ 30-36"	6/28/2022	2.5-3	In-Situ	< 0.00200	< 0.00399	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	61.7
Bottom Hole 1 @ 42-48"	6/28/2022	3.5-4	In-Situ	< 0.00198	< 0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	77.8
Bottom Hole 2 @ 0-6"	6/28/2022	0-0.5	In-Situ	< 0.100	25.5	408	804	1,210	<49.8	1,210	7,200
Bottom Hole 2 @ 6-12"	6/28/2022	0.5-1	In-Situ	< 0.00200	< 0.00401	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	1,830
Bottom Hole 3 @ 0-6"	6/28/2022	0-0.5	In-Situ	< 0.399	28.1	1,180	2,020	3,200	<250	3,200	4,600
Bottom Hole 3 @ 6-12"	6/28/2022	0.5-1	In-Situ	< 0.199	33.8	1,010	1,830	2,840	<249	2,840	3,740
Bottom Hole 4 @ 0-6"	6/28/2022	0-0.5	In-Situ	< 0.0994	42.8	1,690	3,610	5,300	<250	5,300	3,830

# Appendix A

**Initial Release Notification and Corrective Action Form C-141** 

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	nAPP2216550022
District RP	
Facility ID	
Application ID	

#### **Release Notification**

#### **Responsible Party**

Responsible	Party: Chev	ron USA			OGRID: 4	1323		
•	Contact Name: Amy Barnhill				Contact Telephone: 432-687-7108			
		l@chevron.com				(assigned by OCD)		
		: 6301 Deauville E	Rlvd Midland Tx	79706		(mongreu ey e e e)		
Contact man	mg address.	. 0301 Deadville 1	orva midiana, rx	17100				
			Location	n of R	elease S	ource		
Latitude 32.7	1306				Longitude :	-103.9192		
Lutitude 32.7	1500		(NAD 83 in a	decimal deg	rees to 5 decir	mal places)		
Site Name: B	enson Shug	art Waterflood Un	it #3 CTB		Site Type:	Oil		
Date Release	Discovered	: 6-9-22			API# (if app	plicable)		
II:4 I -44	G4:	T1-:	D		C			
Unit Letter J	Section 26	Township 18S	Range 30E	Eddy	Cour	nty		
3	20	105	JOL	Ludy				
Surface Owne	r: State	∑ Federal	ribal  Private	(Name: _		)		
			Nature an	id Vol	ume of 1	Release		
				ch calculati	ons or specific	justification for the volumes provided below)		
Crude Oi		Volume Release	ed (bbls) 11.75			Volume Recovered (bbls) 9.6		
Noduced Produced	Water	Volume Release	ed (bbls) 23.9			Volume Recovered (bbls)		
		Is the concentra produced water	tion of dissolved	chloride	in the	e Yes No		
Condensa	ite	Volume Release				Volume Recovered (bbls)		
Natural C	ias	Volume Release	ed (Mcf)			Volume Recovered (Mcf)		
Other (de	scribe)	Volume/Weight	t Released (provi	de units)		Volume/Weight Recovered (provide units)		
Cause of Rel	ease: Hole i	n bottom of heater	treater					

Received by OCD: 7/27/2022 11:08:23 AM Form C-141 State of New Mexico Page 2 Oil Conservation Division

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1 426	IJ	$\boldsymbol{v}_{I}$	/ <b>U</b>

Incident ID	nAPP2216550022
District RP	
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Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the respon	sible party consider this a major release?
⊠ Yes □ No		
	otice given to the OCD? By whom? To wh her from Amy Barnhill on 6-10-22 at 7:39an	om? When and by what means (phone, email, etc)?
	Initial Ro	esponse
The responsible	party must undertake the following actions immediatel	vunless they could create a safety hazard that would result in injury
The source of the rele	ease has been stopped.	
☐ The impacted area ha	s been secured to protect human health and	the environment.
Released materials ha	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed and	l managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain v	vhy:
Per 19.15.29.8 B. (4) NM	AC the responsible party may commence re	emediation immediately after discovery of a release. If remediation
has begun, please attach	a narrative of actions to date. If remedial	efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain release notinent. The acceptance of a C-141 report by the Cate and remediate contamination that pose a thre	pest of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name: Amy Barn	hill	Title: Water Specialist
Signature:	hill	Date: 6-14-22
email: ABarnhill@chevro	on.com_	Telephone: 432-687-7108
OCD Only		
Received by:		Date:

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**Spill Calculations:** 

MCBU Spill Ca	lculatio	ns Works	sheet (Ma	y 2019 Release)	II light blue a	reas are Requir	ed Informatio	Incident D	ate		6/9	9/2022	2022											
Only Change Value				,																		Start Time	End	Time
omy onange valu				hange Formulas!!		Conversion	Table	Incident Time			12:00 PM		0 PM											
		isions in fe		mange i omitalas		Conversion	Table	Location				U 3 CTE												
	All dillier	isions in ic		Total Volume of Fluid in				Location	<u> </u>		BOW	0 3 011												
	Length	Width	Depth	barrels		Conversions	Feet	All volume			ble in barrels													
									Standing		dimensions /	Oil	Wate											
Average total depth Use oil depth or	44	19	0.1250	18.61	Fluid total	1 inch	0.0833	Area	Liquid	In Soil	shape	Volume	Volum											
skim thickness	44	18	0.0833	11.75	Oil volume	2 inches	0.1667	1 1	18.61	5.29	44 x 18	11.75	23.9											
					Water Volume	3 inches	0.2500	2																
						4 inches	0.3333	3																
	Triang	ular spill				5 inches	0.4167	4																
		sions in fe	et!			6 inches	0.5000	5																
				Total Volume of Fluid in								e Water												
	Length	Width	Depth	barrels		7 inches	0.5833	6																
Average total depth				0.00	Fluid total	8 inches	0.6667	7																
Use oil depth or				0.00	Oilveboor	O inches	0.7500	8																
skim thickness				0.00	Oil volume	9 inches	0.7500	8																
				0.00	Water Volume	10 inches	0.8333				Takal Elizab	44.75	02.0											
						11 inches	0.9167				Total Fluid	11.75	23.9											
	Circular Spill					1/256 inch	0.000326																	
	All dimer	nensions in feet! 1/128 inch 0.000651 Fluid Recovere		in barre	S	Oil Volume	Wa	ater																
	Diameter	Depth		Total Volume of Fluid in barrels		1/64 inch	0.0013				9.6	(	)											
Average total depth				0.00	Fluid total	1/32 inch	0.0026	Weather Conditions	Sunny	Ind 15s	102deg													
Use oil depth or									Hole in bottom of treater. Spill cont			oill conta	ained i											
skim thickness				0.00	Oil volume	1/16 inch	0.0052		berm. N	lot lined														
				0.00	Water Volume	1/8 inch	0.0104	Incident Detailed																
	F1. 1.1.1.	0 1 0		0-111.*		1/4 inch	0.0208	- Discription																
			ctangular	Spill *		3/8 inch	0.0313																	
	All dimer	sions in fe	et!			1/2 inch	0.0417																	
			D	Total Volume of Fluid in					Called f	or vac tr	uck.Shut in	wells. S	ent											
	Length	Width	Depth-Soil Penetration	Soil Pore Space (15%) in barrels		5/8 inch	0.0521	Immediate Actions	supervi	sor a me	ssage.													
Average total depth		18		5.29	Fluid total	3/4 inch	0.0521	Taken																
Average total depth		10	0.2500	5.25	ridia total	7/8 inch	0.0729	1																
	Fluid in	Soil Tri	angular S	nill *				Equipment Component	Heater	treater														
		sions in fe		<b></b>				Equipment compension	corrosio															
	All dillion	1010110 111 10	I	Total Volume of Fluid in				1	Conosic	<i>,</i> ,,,														
			Depth-Soil	Soil Pore Space (15%)				Cause																
	Length	Width	Penetration	in barrels				Cause																
Average total depth				0.00	Fluid total																			
	Fluid in Soil Circular Spill *								Hole in	treater b	ottom													
		sions in fe		•				1	. Tole III	LICUICI I	, octorn													
	All dimer	isions in fe	et:	Total Volume of Fluid in				Failure Description																
	1	Depth-Soil	I	Soil Pore Space (15%)																				
	Diameter	Penetration		in barrels																				

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#### **Site Assessment/Characterization**

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_>184 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	⊠ Yes □ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes ⊠ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vercontamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	rtical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
<ul> <li>Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well</li> <li>Field data</li> <li>Data table of soil contaminant concentration data</li> <li>Depth to water determination</li> <li>Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>Boring or excavation logs</li> </ul>	.ls.
Photographs including date and GIS information	

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

□ Laboratory data including chain of custody

▼ Topographic/Aerial maps

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I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the C failed to adequately investigate and remediate contamination that pose a threaddition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	fications and perform corrective actions for releases which may endanger DCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Amy Barnhill	Title: Water Advisor
Signature: Thile	Date: 7-27-22
email:ABarnhill@chevron.com	Telephone: 432-687-7108
	•
OCD Only	
Received by:	Date: <u>07/27/2022</u>

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### **Remediation Plan**

<u>Remediation Plan Checklist</u> : Each of the following items must be included in the plan.	
<ul> <li>☑ Detailed description of proposed remediation technique</li> <li>☑ Scaled sitemap with GPS coordinates showing delineation points</li> <li>☑ Estimated volume of material to be remediated</li> <li>☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days C</li> </ul>	OCD approval is required)
Deferral Requests Only: Each of the following items must be confirmed as part of any reque	est for deferral of remediation.
Contamination must be in areas immediately under or around production equipment where r deconstruction.	
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human health, the environment, or ground	dwater.
I hereby certify that the information given above is true and complete to the best of my knowled rules and regulations all operators are required to report and/or file certain release notifications a which may endanger public health or the environment. The acceptance of a C-141 report by the liability should their operations have failed to adequately investigate and remediate contamination surface water, human health or the environment. In addition, OCD acceptance of a C-141 report responsibility for compliance with any other federal, state, or local laws and/or regulations.	OCD does not relieve the operator of on that pose a threat to groundwater,
Printed Name: Amy Barnhill Title: Water Advis	sor
Signature:	
email: ABarnhill@chevron.com Telephone: 432-687-	7108
OCD Only	
Received by: Date:	-
☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied	☐ Deferral Approved
Signature: Date:	

# **Appendix B**

**Groundwater Data Maps and Supporting Water Well Data** 

**Eddy County** 

Drafted: mag

Checked: be

Date:

7/19/22



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

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

No records found.

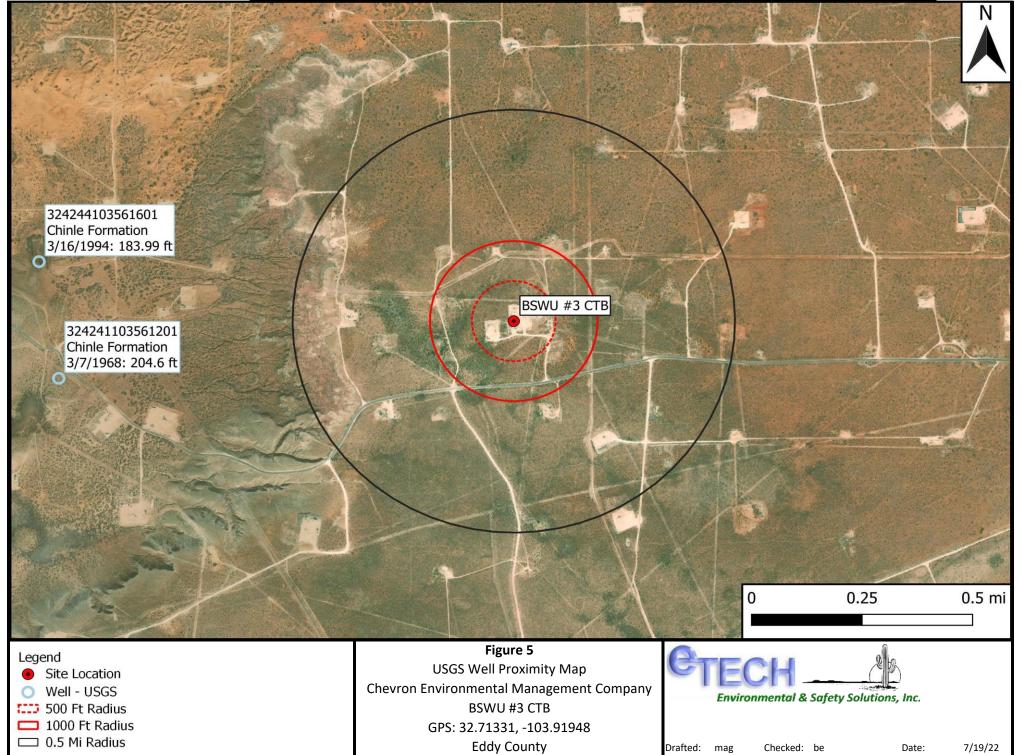
UTMNAD83 Radius Search (in meters):

**Easting (X):** 601265.37 **Northing (Y):** 3620021.27 **Radius:** 1610

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

7/19/22 12:20 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER





USGS Home Contact USGS Search USGS

#### **National Water Information System: Web Interface**

USGS Water Resources	Data Category:		Geographic Area:		
5565 Water Resources	Groundwater	<b>~</b>	United States	~	GO

Click for News Bulletins

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

#### Search Results -- 1 sites found

**Agency code =** usgs **site\_no list =** • 324241103561201

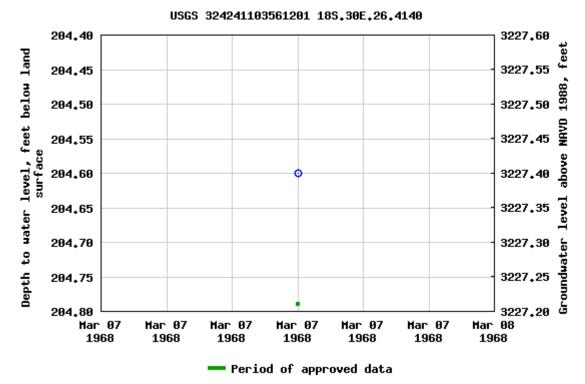
#### Minimum number of levels = 1

Save file of selected sites to local disk for future upload

#### USGS 324241103561201 18S.30E.26.4140

Available data for this site	Groundwater:	Field measurements	<b>→</b> [ GO ]	
Eddy County, New Mexico				
Hydrologic Unit Code 1306	0011			
Latitude 32°42'41", Longit	tude 103°56	5'12" NAD27		
Land-surface elevation 3,4	32 feet abo	ve NAVD88		
The depth of the well is 23	0 feet below	v land surface.		
This well is completed in th	ne Other aq	uifers (N9999OTI	HER) national	aquifer.
This well is completed in the	ne Chinle Fo	rmation (231CHI	NL) local aquif	fer.

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



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

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

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

**Title: Groundwater for USA: Water Levels** 

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

Page Contact Information: <u>USGS Water Data Support Team</u>

Page Last Modified: 2022-07-19 14:18:29 EDT

0.57 0.49 nadww01





USGS Home Contact USGS Search USGS

#### **National Water Information System: Web Interface**

LICCC	M/nhow	December
U3G3	water	Resources

Data Category:		Geographic Area:		
Groundwater	<b>~</b> ]	United States	<b>~</b>	GO

\* We've detected you're using a mobile device. Find our <u>Next Generation Station Page</u> <u>here.</u>

#### Click to hideNews Bulletins

- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access realtime water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

#### Search Results -- 1 sites found

Agency code = usgs site\_no list =

• 324244103561601

#### Minimum number of levels = 1

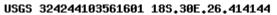
Save file of selected sites to local disk for future upload

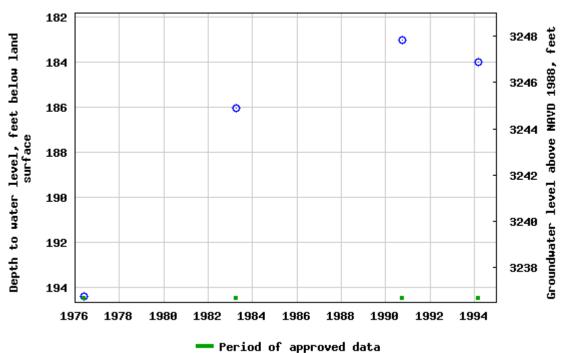
#### USGS 324244103561601 18S.30E.26.414144

Available data for this site	Groundwater:	Field measurements	~	GO
Eddy County, New Mexico				
Hydrologic Unit Code 1306	0011			
Latitude 32°42'55.8", Long	gitude 103°	56'16.4" NAD83		
Land-surface elevation 3,4	31 feet abo	ve NAVD88		
This well is completed in th	e Other aq	uifers (N9999OT	HER)	national aquifer.
This well is completed in th	e Chinle Fo	rmation (231CH	NL) İ	ocal aquifer.

<u>Table of data</u>
<u>Tab-separated data</u>
Graph of data
Reselect period

**Output formats** 





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

Questions about sites/data?
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U.S. Department of the Interior | U.S. Geological Survey

**Title: Groundwater for USA: Water Levels** 

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

Page Contact Information: <u>USGS Water Data Support Team</u>

Page Last Modified: 2022-07-19 14:18:30 EDT

0.56 0.49 nadww01



# **Appendix C Photographic Documentation**

#### Photographic Log

**Photo Number:** 

1

Photo Direction: North

**Photo Description:** 

View of impacted area and surrounding containment.



**Photo Number:** 

2

**Photo Direction:** South

**Photo Description:** 

View of impacted area and surrounding containment.



#### Photographic Log

**Photo Number:** 

3

**Photo Direction:**Southeast

**Photo Description:** 

View of impacted area and surrounding containment.



**Photo Number:** 

4

**Photo Direction:** 

West

**Photo Description:** 

View of impacted area and surrounding containment.



# Appendix D Laboratory Analytical

# **Environment Testing America**

### **ANALYTICAL REPORT**

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

Laboratory Job ID: 880-16439-1 Client Project/Site: BSWU #3 CTB

or:

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

Attn: Brandon Wilson

MRAMER

Authorized for release by: 7/11/2022 10:34:20 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project results through EO L.

Have a Question?

Ask
The

Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 11/21/2022 10:02:00 AM

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

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

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<u> 13</u>

14

Laboratory Job ID: 880-16439-1

Client: Etech Environmental & Safety Solutions Project/Site: BSWU #3 CTB

# **Table of Contents**

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#### **Definitions/Glossary**

Job ID: 880-16439-1 Client: Etech Environmental & Safety Solutions Project/Site: BSWU #3 CTB

**Qualifiers** 

**GC VOA** Qualifier

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

**GC Semi VOA** 

Qualifier **Qualifier Description** \*1 LCS/LCSD RPD exceeds control limits. F1 MS and/or MSD recovery exceeds control limits. S1+ Surrogate recovery exceeds control limits, high biased. 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 Contains No Free Liquid **CNF** 

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac **Dilution Factor** 

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) Limit of Quantitation (DoD/DOE) LOQ

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL ML Minimum Level (Dioxin) MPN Most Probable Number MOI 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 **Practical Quantitation Limit PQL** 

**PRES** Presumptive **Quality Control** QC

Relative Error Ratio (Radiochemistry) **RER** 

Reporting Limit or Requested Limit (Radiochemistry) RL

**RPD** Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

**Eurofins Midland** 

#### **Case Narrative**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

Job ID: 880-16439-1

**Laboratory: Eurofins Midland** 

Narrative

Job Narrative 880-16439-1

#### Receipt

The samples were received on 6/29/2022 12:51 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 5.1°C

#### **GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: Bottom Hole 1 (880-16439-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: Surrogate recovery for the following sample was outside control limits: Bottom Hole 2 (880-16439-7). 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 1 (880-16439-2). 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 3 (880-16439-9). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-28738 and analytical batch 880-28713 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

Method 8015MOD\_NM: The matrix spike (MS) recoveries for preparation batch 880-28738 and analytical batch 880-28713 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits

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

#### HPLC/IC

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

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#### **Client Sample Results**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Lab Sample ID: 880-16439-1

Matrix: Solid

Job ID: 880-16439-1

**Client Sample ID: Bottom Hole 1** 

Date Collected: 06/28/22 10:00 Date Received: 06/29/22 12:51

Sample Depth: 0-6"

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.336		0.200		mg/Kg		07/07/22 10:17	07/07/22 20:39	100
Toluene	23.5		0.200		mg/Kg		07/07/22 10:17	07/07/22 20:39	100
Ethylbenzene	31.2		0.200		mg/Kg		07/07/22 10:17	07/07/22 20:39	10
m-Xylene & p-Xylene	20.2		0.400		mg/Kg		07/07/22 10:17	07/07/22 20:39	100
o-Xylene	16.8		0.200		mg/Kg		07/07/22 10:17	07/07/22 20:39	100
Xylenes, Total	37.0		0.400		mg/Kg		07/07/22 10:17	07/07/22 20:39	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	113		70 - 130				07/07/22 10:17	07/07/22 20:39	100
1,4-Difluorobenzene (Surr)	85		70 - 130				07/07/22 10:17	07/07/22 20:39	100
Method: Total BTEX - Total BTE	<b>Calculation</b>								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	92.0	o) (00)	0.400		mg/Kg			07/07/22 10:19	
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	3650		250		mg/Kg			07/01/22 13:31	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	1570		250		mg/Kg		06/30/22 10:13	07/01/22 04:58	Ę
Diesel Range Organics (Over C10-C28)	2080	*1	250		mg/Kg		06/30/22 10:13	07/01/22 04:58	Ę
Oll Range Organics (Over C28-C36)	<250	U	250		mg/Kg		06/30/22 10:13	07/01/22 04:58	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	92		70 - 130				06/30/22 10:13	07/01/22 04:58	
o-Terphenyl	80		70 - 130				06/30/22 10:13	07/01/22 04:58	Ę
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro		Soluble Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa

**Client Sample ID: Bottom Hole 1** 

Date Collected: 06/28/22 10:02

Date Received: 06/29/22 12:51

Sample Depth: 6-12"

Analyte	Result Q	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.368	0.200		mg/Kg		07/07/22 10:17	07/07/22 20:59	100
Toluene	50.8	1.00		mg/Kg		07/09/22 14:01	07/10/22 11:12	500
Ethylbenzene	54.9	1.00		mg/Kg		07/09/22 14:01	07/10/22 11:12	500
m-Xylene & p-Xylene	33.8	0.401		mg/Kg		07/07/22 10:17	07/07/22 20:59	100
o-Xylene	22.7	0.200		mg/Kg		07/07/22 10:17	07/07/22 20:59	100
Xylenes, Total	56.5	0.401		mg/Kg		07/07/22 10:17	07/07/22 20:59	100
Surrogate	%Recovery Q	ualifier Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		70 - 130				07/07/22 10:17	07/07/22 20:59	100

**Eurofins Midland** 

Lab Sample ID: 880-16439-2

Matrix: Solid

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

Client Sample ID: Bottom Hole 1

Date Collected: 06/28/22 10:02 Date Received: 06/29/22 12:51

Sample Depth: 6-12"

Lab Sample ID: 880-16439-2

Lab Sample ID: 880-16439-3

Matrix: Solid

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92	70 _ 130	07/07/22 10:17	07/07/22 20:59	100

**Method: Total BTEX - Total BTEX Calculation** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	163		1.00		mg/Kg			07/07/22 10:19	1

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

	. 9 (2.1.0) (0.0)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	7380	250	mg/Kg			07/01/22 13:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	3780		250		mg/Kg		06/30/22 10:13	07/01/22 05:19	5
Diesel Range Organics (Over C10-C28)	3600	*1	250		mg/Kg		06/30/22 10:13	07/01/22 05:19	5
Oll Range Organics (Over C28-C36)	<250	U	250		mg/Kg		06/30/22 10:13	07/01/22 05:19	5
Surrements	9/ <b>D</b> anayamı	Ouglifies	l imita				Dramarad	Amalumad	Dil 5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	D
1-Chlorooctane	131	S1+	70 - 130	06/30/22 10:13	07/01/22 05:19	
o-Terphenyl	111		70 - 130	06/30/22 10:13	07/01/22 05:19	

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	896	25.2	mg/Kg			07/07/22 10:11	5

Client Sample ID: Bottom Hole 1

Date Collected: 06/28/22 10:04 Date Received: 06/29/22 12:51

Sample Depth: 18-24"

Mothod: 9021D	Volatile Organie	Compounds (GC)
Melliou. Ouz ID -	voiatile Organic	Compounds (GC)

Wethou. 002 ID - Volatile Orga	inc compounds (	,00)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/05/22 13:34	07/06/22 18:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/05/22 13:34	07/06/22 18:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/05/22 13:34	07/06/22 18:03	1
m-Xylene & p-Xylene	0.00434		0.00398		mg/Kg		07/05/22 13:34	07/06/22 18:03	1
o-Xylene	0.00458		0.00199		mg/Kg		07/05/22 13:34	07/06/22 18:03	1
Xylenes, Total	0.00892		0.00398		mg/Kg		07/05/22 13:34	07/06/22 18:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				07/05/22 13:34	07/06/22 18:03	1
1 4-Difluorobenzene (Surr)	98		70 130				07/05/22 13:34	07/06/22 18:03	1

1,4-Difluorobenzene (Surr)	98	70 - 130	07/05/22 13:34	07/06/22 18:03	1

**Method: Total BTEX - Total BTEX Calculation** 

Analyte		Qualifier	NL.	MIDE	Ollit	_	riepaieu	Allalyzeu	Dil Fac
Total BTEX	0.00892		0.00398		mg/Kg			07/07/22 10:19	1
Total BTEX	0.00892		0.00398		mg/Kg				07/07/22 10:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/01/22 13:31	1

**Eurofins Midland** 

5

**Matrix: Solid** 

## **Client Sample Results**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Lab Sample ID: 880-16439-3

Lab Sample ID: 880-16439-4

**Matrix: Solid** 

Matrix: Solid

Job ID: 880-16439-1

**Client Sample ID: Bottom Hole 1** Date Collected: 06/28/22 10:04

Date Received: 06/29/22 12:51 Sample Depth: 18-24"

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		06/30/22 10:13	07/01/22 03:11	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U *1	50.0		mg/Kg		06/30/22 10:13	07/01/22 03:11	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/30/22 10:13	07/01/22 03:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				06/30/22 10:13	07/01/22 03:11	1
o-Terphenyl	119		70 - 130				06/30/22 10:13	07/01/22 03:11	1
- Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

**Client Sample ID: Bottom Hole 1** 

Date Collected: 06/28/22 10:06

Date Received: 06/29/22 12:51

Sample Depth: 30-36"

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 18:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 18:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 18:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/05/22 13:34	07/06/22 18:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 18:23	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/05/22 13:34	07/06/22 18:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				07/05/22 13:34	07/06/22 18:23	1
1,4-Difluorobenzene (Surr)	97		70 - 130				07/05/22 13:34	07/06/22 18:23	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/07/22 10:19	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/01/22 13:31	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (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		06/30/22 10:13	07/01/22 03:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		06/30/22 10:13	07/01/22 03:54	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/30/22 10:13	07/01/22 03:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				06/30/22 10:13	07/01/22 03:54	1
o-Terphenyl	105		70 - 130				06/30/22 10:13	07/01/22 03:54	1

### **Client Sample Results**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

Client Sample ID: Bottom Hole 1

Date Collected: 06/28/22 10:06 Date Received: 06/29/22 12:51

Sample Depth: 30-36"

Lab Sample ID: 880-16439-4

Lab Sample ID: 880-16439-5

Analyzed

07/07/22 10:19

07/01/22 04:15

**Matrix: Solid** 

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed 07/07/22 11:45 4.99 Chloride 61.7 mg/Kg

**Client Sample ID: Bottom Hole 1** 

**Method: Total BTEX - Total BTEX Calculation** 

Date Collected: 06/28/22 10:08 Date Received: 06/29/22 12:51

Sample Depth: 42-48"

Analyte

Total BTEX

Diesel Range Organics (Over

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/05/22 13:34	07/06/22 18:44	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/05/22 13:34	07/06/22 18:44	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/05/22 13:34	07/06/22 18:44	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/05/22 13:34	07/06/22 18:44	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/05/22 13:34	07/06/22 18:44	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/05/22 13:34	07/06/22 18:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				07/05/22 13:34	07/06/22 18:44	1
1,4-Difluorobenzene (Surr)	103		70 - 130				07/05/22 13:34	07/06/22 18:44	1

F									
Method: 8015 NM - Diesel Rang Analyte		O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9		49.9		mg/Kg	=		07/01/22 13:31	1
Method: 8015B NM - Diesel Rar	nge Organics (D	RO) (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		06/30/22 10:13	07/01/22 04:15	1

0.00396

MDL Unit

mg/Kg

mg/Kg

Prepared

06/30/22 10:13

Result Qualifier

<49.9 U \*1

<0.00396 U

C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	06/30/22 10:13	07/01/22 04:15	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130		06/30/22 10:13	07/01/22 04:15	1
o-Terphenyl	105		70 - 130		06/30/22 10:13	07/01/22 04:15	1

49.9

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	77.8		4.95		mg/Kg			07/07/22 11:54	1

Dil Fac

Client Sample ID: Bottom Hole 2

## **Client Sample Results**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Lab Sample ID: 880-16439-6

Matrix: Solid

Job ID: 880-16439-1

Date Collected: 06/28/22 10:10 Date Received: 06/29/22 12:51

Sample Depth: 0-6"

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.100	U	0.100		mg/Kg		07/01/22 15:28	07/07/22 14:45	50
Toluene	4.37		0.100		mg/Kg		07/01/22 15:28	07/07/22 14:45	50
Ethylbenzene	8.95		0.100		mg/Kg		07/01/22 15:28	07/07/22 14:45	50
m-Xylene & p-Xylene	8.26		0.200		mg/Kg		07/01/22 15:28	07/07/22 14:45	50
o-Xylene	3.94		0.100		mg/Kg		07/01/22 15:28	07/07/22 14:45	50
Xylenes, Total	12.2		0.200		mg/Kg		07/01/22 15:28	07/07/22 14:45	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	190	S1+	70 - 130				07/01/22 15:28	07/07/22 14:45	5
1,4-Difluorobenzene (Surr)	106		70 - 130				07/01/22 15:28	07/07/22 14:45	50
Method: Total BTEX - Total BTE	( Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	25.5		0.200		mg/Kg			07/07/22 10:19	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	1210		49.8		mg/Kg			07/01/22 13:31	-
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	408		49.8		mg/Kg		06/30/22 10:13	07/01/22 06:45	
Diesel Range Organics (Over C10-C28)	804	*1	49.8		mg/Kg		06/30/22 10:13	07/01/22 06:45	
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/30/22 10:13	07/01/22 06:45	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	109		70 - 130				06/30/22 10:13	07/01/22 06:45	
o-Terphenyl	116		70 - 130				06/30/22 10:13	07/01/22 06:45	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro Analyte		Soluble Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: Bottom Hole 2

Date Collected: 06/28/22 10:12 Date Received: 06/29/22 12:51

Sample Depth: 6-12"

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 19:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 19:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 19:04	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/05/22 13:34	07/06/22 19:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 19:04	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/05/22 13:34	07/06/22 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				07/05/22 13:34	07/06/22 19:04	1

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Lab Sample ID: 880-16439-7

Matrix: Solid

Client Sample ID: Bottom Hole 2

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Date Collected: 06/28/22 10:12

Date Received: 06/29/22 12:51

Job ID: 880-16439-1

Lab Sample ID: 880-16439-7

Lab Sample ID: 880-16439-8

Matrix: Solid

Matrix: Solid

Sample Depth: 6-12"

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	101		70 - 130	07/05/22 13:34	07/06/22 19:04	1

Method:	Total	BTFX	- Total	BTFX	Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/l	(g		07/07/22 10:19	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			07/01/22 13:31	1

Method: 8015B NM - Diese	Range Organics (DRO) (GC)
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						_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/30/22 10:13	07/01/22 04:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		06/30/22 10:13	07/01/22 04:37	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/30/22 10:13	07/01/22 04:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124	70 - 130	06/30/22 10:13	07/01/22 04:37	1
o-Terphenyl	139 S1+	70 - 130	06/30/22 10:13	07/01/22 04:37	1

Method: 300.0 - Anions,	lon Chromatography	· - Soluble
	_	

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1830	24.9	mg/Kg			07/07/22 02:40	5

#### **Client Sample ID: Bottom Hole 3**

Date Collected: 06/28/22 10:14 Date Received: 06/29/22 12:51

Sample Depth: 0-6"

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

Analyte	Result	Qualifier	RL	MDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.399	U	0.399	n	ng/Kg		07/01/22 15:28	07/07/22 15:26	200
Toluene	0.667		0.399	n	ng/Kg		07/01/22 15:28	07/07/22 15:26	200
Ethylbenzene	11.8		0.399	n	ng/Kg		07/01/22 15:28	07/07/22 15:26	200
m-Xylene & p-Xylene	11.3		0.798	n	ng/Kg		07/01/22 15:28	07/07/22 15:26	200
o-Xylene	4.35		0.399	n	ng/Kg		07/01/22 15:28	07/07/22 15:26	200
Xylenes, Total	15.7		0.798	n	ng/Kg		07/01/22 15:28	07/07/22 15:26	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130				07/01/22 15:28	07/07/22 15:26	200
1.4-Difluorobenzene (Surr)	104		70 - 130				07/01/22 15:28	07/07/22 15:26	200

ı	4-bromonuorobenzene (Surr)	142 317	10 - 130	07/01/22 15.26	07/07/22 15.20	20
Į	1,4-Difluorobenzene (Surr)	104	70 - 130	07/01/22 15:28	07/07/22 15:26	20

#### **Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	28.1		0.798		mg/Kg			07/07/22 10:19	1

Method: 8015 NM - Diese	I Range Organics (DRO) (G	C
INICITION. OUTS ININ - DIESCI	i Kange Organics (DKO) (G	U)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3200	250	mg/Kg			07/01/22 13:31	1

**Client Sample ID: Bottom Hole 3** 

## **Client Sample Results**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Lab Sample ID: 880-16439-8

Matrix: Solid

Job ID: 880-16439-1

Date Collected: 06/28/22 10:14 Date Received: 06/29/22 12:51

Sample Depth: 0-6"

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1180		250		mg/Kg		06/30/22 10:13	07/01/22 05:41	5
Diesel Range Organics (Over C10-C28)	2020	*1	250		mg/Kg		06/30/22 10:13	07/01/22 05:41	5
Oll Range Organics (Over C28-C36)	<250	U	250		mg/Kg		06/30/22 10:13	07/01/22 05:41	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				06/30/22 10:13	07/01/22 05:41	5
o-Terphenyl	119		70 - 130				06/30/22 10:13	07/01/22 05:41	5
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
			24.8		mg/Kg			07/07/22 02:48	5

Client Sample ID: Bottom Hole 3

Lab Sample ID: 880-16439-9

Matrix: Solid

Date Collected: 06/28/22 10:16
Date Received: 06/29/22 12:51

Sample Depth: 6-12"

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.199	U	0.199		mg/Kg		07/01/22 15:28	07/07/22 15:06	100
Toluene	1.73		0.199		mg/Kg		07/01/22 15:28	07/07/22 15:06	100
Ethylbenzene	13.3		0.199		mg/Kg		07/01/22 15:28	07/07/22 15:06	100
m-Xylene & p-Xylene	13.4		0.398		mg/Kg		07/01/22 15:28	07/07/22 15:06	100
o-Xylene	5.32		0.199		mg/Kg		07/01/22 15:28	07/07/22 15:06	100
Xylenes, Total	18.7		0.398		mg/Kg		07/01/22 15:28	07/07/22 15:06	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	213	S1+	70 - 130				07/01/22 15:28	07/07/22 15:06	100
1,4-Difluorobenzene (Surr)	96		70 - 130				07/01/22 15:28	07/07/22 15:06	100
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	33.8		0.398		mg/Kg			07/07/22 10:19	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2840		249		mg/Kg			07/01/22 13:31	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	1010		249		mg/Kg		06/30/22 10:13	07/01/22 06:02	5
(GRO)-C6-C10									_
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	1830	*1	249		mg/Kg		06/30/22 10:13	07/01/22 06:02	
Diesel Range Organics (Over C10-C28)	<b>1830</b> <249		249 249		mg/Kg		06/30/22 10:13 06/30/22 10:13	07/01/22 06:02 07/01/22 06:02	
Diesel Range Organics (Over		U							5
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<249	U	249				06/30/22 10:13	07/01/22 06:02	5 Dil Fac

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### **Client Sample Results**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

Lab Sample ID: 880-16439-9

Matrix: Solid

**Matrix: Solid** 

Client Sample ID: Bottom Hole 3

Date Collected: 06/28/22 10:16 Date Received: 06/29/22 12:51

Sample Depth: 6-12"

Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3740		25.2		mg/Kg			07/07/22 02:56	5

Client Sample ID: Bottom Hole 4 Lab Sample ID: 880-16439-10

Result Qualifier

5300

Date Collected: 06/28/22 10:18 Date Received: 06/29/22 12:51

**Method: Total BTEX - Total BTEX Calculation** 

Sample Depth: 0-6"

Analyte

**Total TPH** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0994	U	0.0994		mg/Kg		07/05/22 13:34	07/06/22 21:07	50
Toluene	11.0		0.0994		mg/Kg		07/05/22 13:34	07/06/22 21:07	50
Ethylbenzene	13.2		0.0994		mg/Kg		07/05/22 13:34	07/06/22 21:07	50
m-Xylene & p-Xylene	11.3		0.199		mg/Kg		07/05/22 13:34	07/06/22 21:07	50
o-Xylene	7.30		0.0994		mg/Kg		07/05/22 13:34	07/06/22 21:07	50
Xylenes, Total	18.6		0.199		mg/Kg		07/05/22 13:34	07/06/22 21:07	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				07/05/22 13:34	07/06/22 21:07	50
1,4-Difluorobenzene (Surr)	96		70 - 130				07/05/22 13:34	07/06/22 21:07	50

Total BTEX	42.8	0.199		mg/Kg		(	07/07/22 10:19	•	1
Method: 8015 NM - Diesel Range Organio	cs (DRO) (GC)								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	:

250

RL

MDL Unit

mg/Kg

Prepared

Analyzed

07/01/22 13:31

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1690		250		mg/Kg		06/30/22 10:13	07/01/22 06:23	5
Diesel Range Organics (Over C10-C28)	3610	*1	250		mg/Kg		06/30/22 10:13	07/01/22 06:23	5
OII Range Organics (Over C28-C36)	<250	U	250		mg/Kg		06/30/22 10:13	07/01/22 06:23	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				06/30/22 10:13	07/01/22 06:23	5
o-Terphenyl	122		70 - 130				06/30/22 10:13	07/01/22 06:23	5

Wethou, 300.0 - Allions, foli Chroni	atograpny - Soi	iubie						
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3830	24.9		mg/Kg			07/07/22 03:04	5

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Dil Fac

## **Surrogate Summary**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

Method: 8021B - Volatile Organic Compounds (GC)

latrix: Solid Prep Type: Total/NA

		DED4	DED74	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)	
880-16439-1	Bottom Hole 1	113	85	
880-16439-2	Bottom Hole 1	110	92	
880-16439-3	Bottom Hole 1	111	98	
880-16439-4	Bottom Hole 1	115	97	
880-16439-5	Bottom Hole 1	117	103	
880-16439-6	Bottom Hole 2	190 S1+	106	
880-16439-7	Bottom Hole 2	121	101	
880-16439-8	Bottom Hole 3	142 S1+	104	
880-16439-9	Bottom Hole 3	213 S1+	96	
880-16439-10	Bottom Hole 4	117	96	
880-16557-A-5-E MS	Matrix Spike	111	103	
880-16557-A-5-F MSD	Matrix Spike Duplicate	108	98	
880-16698-A-11-E MS	Matrix Spike	111	103	
880-16698-A-11-F MSD	Matrix Spike Duplicate	110	103	
890-2475-A-1-G MS	Matrix Spike	110	102	
890-2475-A-1-H MSD	Matrix Spike Duplicate	109	99	
890-2497-A-18-A MS	Matrix Spike	117	88	
890-2497-A-18-B MSD	Matrix Spike Duplicate	113	101	
_CS 880-28904/1-A	Lab Control Sample	107	101	
_CS 880-29048/1-A	Lab Control Sample	113	104	
_CS 880-29191/1-A	Lab Control Sample	105	100	
LCS 880-29360/1-A	Lab Control Sample	113	104	
LCSD 880-28904/2-A	Lab Control Sample Dup	107	100	
LCSD 880-29048/2-A	Lab Control Sample Dup	112	104	
LCSD 880-29191/2-A	Lab Control Sample Dup	109	97	
LCSD 880-29360/2-A	Lab Control Sample Dup	113	104	
MB 880-28904/5-A	Method Blank	96	87	
MB 880-29048/5-A	Method Blank	103	94	
MB 880-29191/5-A	Method Blank	103	99	
MB 880-29325/5-A	Method Blank	99	90	
MB 880-29360/5-A	Method Blank	104	93	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-16439-1	Bottom Hole 1	92	80
880-16439-2	Bottom Hole 1	131 S1+	111
880-16439-3	Bottom Hole 1	117	119
880-16439-4	Bottom Hole 1	91	105
880-16439-5	Bottom Hole 1	96	105
880-16439-6	Bottom Hole 2	109	116
880-16439-7	Bottom Hole 2	124	139 S1+
880-16439-8	Bottom Hole 3	103	119

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Released to Imaging: 11/21/2022 10:02:00 AM

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## **Surrogate Summary**

Client: Etech Environmental & Safety Solutions Job ID: 880-16439-1

Project/Site: BSWU #3 CTB

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)	
880-16439-9	Bottom Hole 3	110	138 S1+	
880-16439-10	Bottom Hole 4	121	122	
890-2471-A-21-B MS	Matrix Spike	89	96	
890-2471-A-21-C MSD	Matrix Spike Duplicate	102	109	
LCS 880-28738/2-A	Lab Control Sample	89	94	
LCSD 880-28738/3-A	Lab Control Sample Dup	81	76	
MB 880-28738/1-A	Method Blank	104	122	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

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

Lab Sample ID: MB 880-28904/5-A

Lab Sample ID: LCS 880-28904/1-A

**Matrix: Solid** 

**Matrix: Solid** 

Analysis Batch: 29172

Analysis Batch: 29172

Client Sample ID: Method Blank

mont oumpio ib. montou biank	
Prep Type: Total/NA	
Pren Batch: 28904	

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/01/22 15:28	07/07/22 12:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/01/22 15:28	07/07/22 12:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/01/22 15:28	07/07/22 12:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/01/22 15:28	07/07/22 12:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/01/22 15:28	07/07/22 12:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/01/22 15:28	07/07/22 12:00	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	07/01/22 15:28	07/07/22 12:00	1
1,4-Difluorobenzene (Surr)	87		70 - 130	07/01/22 15:28	07/07/22 12:00	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 28904

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1014 mg/Kg 101 70 - 130 Toluene 0.100 0.09844 mg/Kg 98 70 - 130 0.100 Ethylbenzene 0.1029 mg/Kg 103 70 - 130 0.200 0.2124 106 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.1048 105 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	107	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

**Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

Analysis Batch: 29172

Lab Sample ID: LCSD 880-28904/2-A

Prep Type: Total/NA Prep Batch: 28904

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1049		mg/Kg		105	70 - 130	3	35	
Toluene	0.100	0.1030		mg/Kg		103	70 - 130	5	35	
Ethylbenzene	0.100	0.1077		mg/Kg		108	70 - 130	5	35	
m-Xylene & p-Xylene	0.200	0.2212		mg/Kg		111	70 - 130	4	35	
o-Xylene	0.100	0.1094		mg/Kg		109	70 - 130	4	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1.4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-2475-A-1-G MS

**Matrix: Solid** 

Analysis Batch: 29172

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

Prep Batch: 28904

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09951		mg/Kg		99	70 - 130	
Toluene	<0.00201	U	0.101	0.09548		mg/Kg		95	70 - 130	

## QC Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

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

Lab Sample ID: 890-2475-A-1-G MS

Lab Sample ID: 890-2475-A-1-H MSD

**Matrix: Solid** 

**Matrix: Solid** 

Analysis Batch: 29172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 28904

Sample	Sample	<b>Бріке</b>	IVIS	M2				%Rec
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
<0.00201	U	0.101	0.09892		mg/Kg		98	70 - 130
<0.00402	U	0.202	0.2043		mg/Kg		101	70 - 130
<0.00201	U	0.101	0.1009		mg/Kg		100	70 - 130
	Result < 0.00201 < 0.00402	Result   Qualifier	Result         Qualifier         Added           <0.00201	Result         Qualifier         Added         Result           <0.00201	Result         Qualifier         Added         Result         Qualifier           <0.00201	Result         Qualifier         Added         Result         Qualifier         Unit           <0.00201	Result         Qualifier         Added         Result         Qualifier         Unit         D           <0.00201	Result          Qualifier         Added          Result Qualifier         Qualifier         Unit Discrete         Discrete         %Rec           <0.00201

MS MS

Surrogate	%Recovery Qu	ualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28904

RPD

**Analysis Batch: 29172** Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit %Rec 0.100 Benzene <0.00201 U 0.09182 mg/Kg 92 70 - 130 8 35 Toluene <0.00201 U 0.100 0.08800 70 - 130 mg/Kg 88 8 35 Ethylbenzene <0.00201 U 0.100 0.08801 mg/Kg 88 70 - 130 12 35 <0.00402 U 0.200 0.1817 70 - 130 35 m-Xylene & p-Xylene mg/Kg 12 0.100 o-Xylene <0.00201 U 0.09018 90 70 - 130 11 mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: MB 880-29048/5-A

**Matrix: Solid** 

**Analysis Batch: 29109** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29048

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 12:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 12:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 12:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/05/22 13:34	07/06/22 12:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/05/22 13:34	07/06/22 12:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/05/22 13:34	07/06/22 12:38	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	07/05/22 13:34	07/06/22 12:38	1
1,4-Difluorobenzene (Surr)	94		70 - 130	07/05/22 13:34	07/06/22 12:38	1

Lab Sample ID: LCS 880-29048/1-A

**Matrix: Solid** 

Analysis Batch: 29109

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 29048

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1020		mg/Kg		102	70 - 130	
Toluene	0.100	0.1140		mg/Kg		114	70 - 130	
Ethylbenzene	0.100	0.09745		mg/Kg		97	70 - 130	
m-Xylene & p-Xylene	0.200	0.1975		mg/Kg		99	70 - 130	

Lab Sample ID: LCS 880-29048/1-A

Lab Sample ID: LCSD 880-29048/2-A

## QC Sample Results

Client: Etech Environmental & Safety Solutions

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

Project/Site: BSWU #3 CTB

**Analysis Batch: 29109** 

4-Bromofluorobenzene (Surr)

**Analysis Batch: 29109** 

1,4-Difluorobenzene (Surr)

**Matrix: Solid** 

Surrogate

Matrix: Solid

Job ID: 880-16439-1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 29048

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits D 0.100 0 1127 113 70 - 130 o-Xylene mg/Kg

70 - 130

LCS LCS %Recovery Qualifier Limits 113 70 - 130

104

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29048

Spike LCSD LCSD RPD Analyte Added Result Qualifier Unit %Rec Limits Limit D Benzene 0.100 0.1084 mg/Kg 108 70 - 130 6 35 Toluene 0.100 0.1088 mg/Kg 109 70 - 130 35 5 Ethylbenzene 0.100 0.09420 mg/Kg 94 70 - 130 3 35 m-Xylene & p-Xylene 0.200 0.1925 mg/Kg 96 70 - 130 35 0.100 0.1098 70 - 130 o-Xylene mg/Kg 110

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 112 70 - 130 1,4-Difluorobenzene (Surr) 104 70 - 130

Lab Sample ID: 890-2497-A-18-A MS

**Matrix: Solid** 

**Analysis Batch: 29109** 

MS MS Sample Sample Spike %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Benzene <0.00201 U 0.101 0.08092 mg/Kg 80 70 - 130 Toluene < 0.00201 U 0.101 0.09890 mg/Kg 98 70 - 130 Ethylbenzene <0.00201 U 0.101 0.08695 mg/Kg 86 70 - 130 m-Xylene & p-Xylene < 0.00402 U 0.202 0.1775 mg/Kg 88 70 - 130 o-Xylene <0.00201 U 0.101 0.1012 mg/Kg 100 70 - 130

MS MS %Recovery Surrogate Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 117 70 - 130 1,4-Difluorobenzene (Surr) 88

Lab Sample ID: 890-2497-A-18-B MSD

**Matrix: Solid** 

**Analysis Batch: 29109** 

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 29048

Prep Batch: 29048

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	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.100	0.09817	-	mg/Kg		98	70 - 130	19	35
Toluene	<0.00201	U	0.100	0.1032		mg/Kg		103	70 - 130	4	35
Ethylbenzene	<0.00201	U	0.100	0.08557		mg/Kg		85	70 - 130	2	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1738		mg/Kg		87	70 - 130	2	35
o-Xylene	<0.00201	U	0.100	0.09878		mg/Kg		99	70 - 130	2	35
•											

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

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

Lab Sample ID: 890-2497-A-18-B MSD

**Matrix: Solid** 

**Analysis Batch: 29109** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 29048

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1.4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-29191/5-A

**Matrix: Solid** 

Analysis Batch: 29173

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

Prep Batch: 29191

		IVID	IVID							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Benzene	<0.00200	U	0.00200		mg/Kg		07/07/22 10:17	07/07/22 12:31	1
	Toluene	<0.00200	U	0.00200		mg/Kg		07/07/22 10:17	07/07/22 12:31	1
	Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/07/22 10:17	07/07/22 12:31	1
	m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/07/22 10:17	07/07/22 12:31	1
	o-Xylene	<0.00200	U	0.00200		mg/Kg		07/07/22 10:17	07/07/22 12:31	1
	Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/07/22 10:17	07/07/22 12:31	1
ı										

MB MB Qualifier Limits Prepared Analyzed Dil Fac Surrogate %Recovery 07/07/22 10:17 4-Bromofluorobenzene (Surr) 103 70 - 130 07/07/22 12:31 1,4-Difluorobenzene (Surr) 99 70 - 130 07/07/22 10:17 07/07/22 12:31

Lab Sample ID: LCS 880-29191/1-A

**Matrix: Solid** 

**Analysis Batch: 29173** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 29191

LCS LCS Spike %Rec Result Qualifier Analyte Added Unit %Rec Limits Benzene 0.100 0.09870 99 70 - 130 mg/Kg 70 - 130 Toluene 0.100 0.1043 104 mg/Kg Ethylbenzene 0.100 0.08958 mg/Kg 90 70 - 130 70 - 130 0.200 m-Xylene & p-Xylene 0.1825 mg/Kg 91 o-Xylene 0.100 0.1042 mg/Kg 104 70 - 130

LCS LCS Qualifier %Recovery Limits Surrogate 105 70 - 130 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 100 70 - 130

Lab Sample ID: LCSD 880-29191/2-A

**Matrix: Solid** 

**Analysis Batch: 29173** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 29191

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09476		mg/Kg		95	70 - 130	4	35
Toluene	0.100	0.1077		mg/Kg		108	70 - 130	3	35
Ethylbenzene	0.100	0.09471		mg/Kg		95	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1942		mg/Kg		97	70 - 130	6	35
o-Xylene	0.100	0.1100		mg/Kg		110	70 - 130	5	35

LCSD LCSD

%Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 109

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Released to Imaging: 11/21/2022 10:02:00 AM

### QC Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

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

Lab Sample ID: LCSD 880-29191/2-A

**Matrix: Solid** 

**Analysis Batch: 29173** 

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Prep Batch: 29191

LCSD LCSD

%Recovery Qualifier Surrogate Limits 1,4-Difluorobenzene (Surr) 97 70 - 130

Client Sample ID: Matrix Spike Lab Sample ID: 880-16557-A-5-E MS

**Analysis Batch: 29173** 

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

Prep Batch: 29191

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.09714	-	mg/Kg		96	70 - 130	
Toluene	<0.00199	U	0.101	0.1018		mg/Kg		101	70 - 130	
Ethylbenzene	<0.00199	U	0.101	0.08591		mg/Kg		85	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1763		mg/Kg		87	70 - 130	
o-Xylene	<0.00199	U	0.101	0.09959		mg/Kg		99	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	r Limits
4-Bromofluorobenzene (Surr)	111	70 - 130
1,4-Difluorobenzene (Surr)	103	70 - 130

Lab Sample ID: 880-16557-A-5-F MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

**Analysis Batch: 29173** 

Prep Type: Total/NA

Prep Batch: 29191

Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
<0.00199	U	0.100	0.09385		mg/Kg		94	70 - 130	3	35
< 0.00199	U	0.100	0.1051		mg/Kg		105	70 - 130	3	35
<0.00199	U	0.100	0.09028		mg/Kg		90	70 - 130	5	35
<0.00398	U	0.200	0.1853		mg/Kg		92	70 - 130	5	35
< 0.00199	U	0.100	0.1044		mg/Kg		104	70 - 130	5	35
	Result <0.00199 <0.00199 <0.00199 <0.00398	Sample   Sample	Result         Qualifier         Added           <0.00199	Result         Qualifier         Added         Result           <0.00199	Result         Qualifier         Added         Result         Qualifier           <0.00199	Result         Qualifier         Added         Result         Qualifier         Unit           <0.00199	Result         Qualifier         Added         Result         Qualifier         Unit         D           <0.00199	Result         Qualifier         Added         Result         Qualifier         Unit         D         %Rec           <0.00199	Sample Result         Sample Qualifier         Spike Added Result         MSD Qualifier         Unit Unit Unit Unit Unit Unit Unit Unit	Sample Result         Sample Qualifier         Spike Added Result         MSD Qualifier         Unit Unit Unit Unit Unit Unit Unit Unit

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	108	70 - 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: MB 880-29325/5-A

**Matrix: Solid** 

**Analysis Batch: 29358** 

Released to Imaging: 11/21/2022 10:02:00 AM

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29325

l		MB	MB							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Benzene	<0.00200	U	0.00200		mg/Kg		07/08/22 14:51	07/09/22 16:11	1
	Toluene	<0.00200	U	0.00200		mg/Kg		07/08/22 14:51	07/09/22 16:11	1
	Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/08/22 14:51	07/09/22 16:11	1
	m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/08/22 14:51	07/09/22 16:11	1
	o-Xylene	<0.00200	U	0.00200		mg/Kg		07/08/22 14:51	07/09/22 16:11	1
	Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/08/22 14:51	07/09/22 16:11	1

мв мв

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	07.	7/08/22 14:51	07/09/22 16:11	1
1,4-Difluorobenzene (Surr)	90		70 - 130	07.	7/08/22 14:51	07/09/22 16:11	1

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

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

Lab Sample ID: MB 880-29360/5-A

**Matrix: Solid** 

Analysis Batch: 29358

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 29360

Dil Fac Analyte Result Qualifier RLMDL Unit D Prepared Analyzed Benzene <0.00200 U 0.00200 mg/Kg 07/09/22 14:01 07/10/22 03:20 Toluene <0.00200 U 0.00200 mg/Kg 07/09/22 14:01 07/10/22 03:20 <0.00200 U Ethylbenzene 0.00200 07/09/22 14:01 07/10/22 03:20 mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 07/09/22 14:01 07/10/22 03:20 07/09/22 14:01 o-Xylene <0.00200 U 0.00200 07/10/22 03:20 mg/Kg <0.00400 U 0.00400 07/09/22 14:01 07/10/22 03:20 Xylenes, Total mg/Kg

MB MB

мв мв

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104	70 - 130	07/09/22 14:01	07/10/22 03:20	1
1,4-Difluorobenzene (Surr)	93	70 - 130	07/09/22 14:01	07/10/22 03:20	1

Lab Sample ID: LCS 880-29360/1-A

**Matrix: Solid** 

**Analysis Batch: 29358** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 29360

LCS LCS Spike Qualifier Analyte Added Result Unit %Rec Limits Benzene 0.100 0.1120 mg/Kg 112 70 - 130 Toluene 0.100 0.1081 mg/Kg 108 70 - 130 Ethylbenzene 0.100 0.1124 mg/Kg 112 70 - 130 0.200 m-Xylene & p-Xylene 0.2330 mg/Kg 117 70 - 130 o-Xylene 0.100 0.1229 mg/Kg 123 70 - 130

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	113	70 - 130
1,4-Difluorobenzene (Surr)	104	70 - 130

Lab Sample ID: LCSD 880-29360/2-A

**Matrix: Solid** 

Analysis Batch: 29358

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 29360

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Benzene 0.100 0.1089 mg/Kg 109 70 - 130 3 35 Toluene 0.100 0.1033 mg/Kg 103 70 - 130 5 35 0.100 0.1106 mg/Kg 111 70 - 130 2 35 Ethylbenzene m-Xylene & p-Xylene 0.200 0.2268 mg/Kg 113 70 - 130 3 35 o-Xylene 0.100 0.1233 mg/Kg 123 70 - 130 35

LCSD LCSD

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene (Surr)	113	70 - 130
1 4-Difluorobenzene (Surr)	104	70 - 130

Lab Sample ID: 880-16698-A-11-E MS

**Matrix: Solid** 

**Analysis Batch: 29358** 

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

Prep Batch: 29360

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 110 U 0.0998 Benzene <0.00199 0 1101 mg/Kg 70 - 130 Toluene <0.00199 U 0.0998 0.1064 mg/Kg 106 70 - 130

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## **QC Sample Results**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

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

Lab Sample ID: 880-16698-A-11-E MS **Matrix: Solid** 

Analysis Batch: 29358

Client Sample ID: Matrix Spike

**Prep Type: Total/NA** 

Prep Batch: 29360

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U	0.0998	0.1093		mg/Kg		109	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2257		mg/Kg		112	70 - 130	
o-Xylene	<0.00199	U	0.0998	0.1192		mg/Kg		119	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

Prep Batch: 29360

Lab Sample ID: 880-16698-A-11-F MSD **Matrix: Solid** 

**Analysis Batch: 29358** 

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	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.1060		mg/Kg		106	70 - 130	4	35
Toluene	<0.00199	U	0.100	0.1020		mg/Kg		101	70 - 130	4	35
Ethylbenzene	<0.00199	U	0.100	0.1052		mg/Kg		104	70 - 130	4	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2165		mg/Kg		107	70 - 130	4	35
o-Xylene	<0.00199	U	0.100	0.1126		mg/Kg		112	70 - 130	6	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-28738/1-A

**Matrix: Solid** 

Analysis Batch: 28713

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 28738

	IND	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/30/22 10:13	06/30/22 22:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/30/22 10:13	06/30/22 22:11	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/30/22 10:13	06/30/22 22:11	1

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	06/30/22 10:13	06/30/22 22:11	1
o-Terphenyl	122		70 - 130	06/30/22 10:13	06/30/22 22:11	1

Lab Sample ID: LCS 880-28738/2-A

**Matrix: Solid** 

Analysis Batch: 28713

Client Sample ID: Lab Control Sample	•
Prep Type: Total/NA	١.

Prep Batch: 28738

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1108		mg/Kg		111	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1029		mg/Kg		103	70 - 130	
C10-C28)								

Lab Sample ID: LCS 880-28738/2-A

Limits

70 - 130

70 - 130

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

**Analysis Batch: 28713** 

Job ID: 880-16439-1

Prep Type: Total/NA

Prep Batch: 28738

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCSD 880-28738/3-A

**Matrix: Solid** 

**Matrix: Solid** 

Surrogate

o-Terphenyl

1-Chlorooctane

**Analysis Batch: 28713** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 28738

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 1198 120 70 - 130 8 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 834.5 \*1 83 mg/Kg 70 - 13021 20 C10-C28)

LCSD LCSD

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

LCS LCS

%Recovery Qualifier

89

94

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	76		70 - 130

Lab Sample ID: 890-2471-A-21-B MS

**Matrix: Solid** 

**Analysis Batch: 28713** 

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 28738

	Sample	Sample	<b>Spike</b>	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U	996	787.7		mg/Kg		79	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U *1 F1	996	670.8	F1	mg/Kg		67	70 - 130	
C10-C28)										

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 89 o-Terphenyl 96 70 - 130

Lab Sample ID: 890-2471-A-21-C MSD

**Matrix: Solid** 

**Analysis Batch: 28713** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28738

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	996	876.4		mg/Kg		88	70 - 130	11	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U *1 F1	996	767.3		mg/Kg		77	70 - 130	13	20
C10 C28)											

C10-C28)

MSD MSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	102	70 - 130
o-Terphenyl	109	70 - 130

## QC Sample Results

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

**Prep Type: Soluble** 

Client Sample ID: Method Blank

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-28870/1-A

**Matrix: Solid** 

**Analysis Batch: 29129** 

мв мв

Analyte Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 07/07/22 05:25

Lab Sample ID: LCS 880-28870/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 29129** 

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 238.6 mg/Kg 95 90 - 110

Lab Sample ID: LCSD 880-28870/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 29129

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 238.6 mg/Kg 90 - 110

Lab Sample ID: 880-16437-A-14-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 29129** 

MS MS Spike %Rec Sample Sample Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Chloride 353 248 594.0 90 - 110 mg/Kg

Lab Sample ID: 880-16437-A-14-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 29129** 

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 353 Chloride 248 593.7 mg/Kg 97 90 \_ 110

Lab Sample ID: MB 880-28872/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 29132** 

мв мв

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 5.00 mg/Kg 07/07/22 01:53

Lab Sample ID: LCS 880-28872/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble** 

**Matrix: Solid Analysis Batch: 29132** 

LCS LCS Spike %Rec Added Result Qualifier Limits Analyte Unit %Rec Chloride 250 239.8 mg/Kg 96 90 - 110

Lab Sample ID: LCSD 880-28872/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

**Analysis Batch: 29132** 

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 241.6 mg/Kg 97 90 - 110 20

**Eurofins Midland** 

**Prep Type: Soluble** 

## **QC Sample Results**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

**Client Sample ID: Bottom Hole 2** 

**Prep Type: Soluble** 

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-16439-6 MS

Matrix: Solid

Analysis Batch: 29132

30-16439-6 MS Client Sample ID: Bottom Hole 2
Prep Type: Soluble

Sample Sample Spike MS MS %Rec Added Result Qualifier Analyte Result Qualifier Unit %Rec Limits Chloride 7200 2500 9838 mg/Kg 106 90 - 110

Lab Sample ID: 880-16439-6 MSD

**Matrix: Solid** 

**Analysis Batch: 29132** 

7 man, 010 = 0101 = 0 10=											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	7200		2500	9743		mg/Kg		102	90 - 110	1	20

ige 55 of 70

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

### **GC VOA**

#### Prep Batch: 28904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-6	Bottom Hole 2	Total/NA	Solid	5035	
880-16439-8	Bottom Hole 3	Total/NA	Solid	5035	
880-16439-9	Bottom Hole 3	Total/NA	Solid	5035	
MB 880-28904/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-28904/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-28904/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2475-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-2475-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Prep Batch: 29048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
880-16439-3	Bottom Hole 1	Total/NA	Solid	5035	<u> </u>
880-16439-4	Bottom Hole 1	Total/NA	Solid	5035	
880-16439-5	Bottom Hole 1	Total/NA	Solid	5035	
880-16439-7	Bottom Hole 2	Total/NA	Solid	5035	
880-16439-10	Bottom Hole 4	Total/NA	Solid	5035	
MB 880-29048/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29048/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29048/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2497-A-18-A MS	Matrix Spike	Total/NA	Solid	5035	
890-2497-A-18-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### **Analysis Batch: 29109**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-3	Bottom Hole 1	Total/NA	Solid	8021B	29048
880-16439-4	Bottom Hole 1	Total/NA	Solid	8021B	29048
880-16439-5	Bottom Hole 1	Total/NA	Solid	8021B	29048
880-16439-7	Bottom Hole 2	Total/NA	Solid	8021B	29048
880-16439-10	Bottom Hole 4	Total/NA	Solid	8021B	29048
MB 880-29048/5-A	Method Blank	Total/NA	Solid	8021B	29048
LCS 880-29048/1-A	Lab Control Sample	Total/NA	Solid	8021B	29048
LCSD 880-29048/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29048
890-2497-A-18-A MS	Matrix Spike	Total/NA	Solid	8021B	29048
890-2497-A-18-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29048

#### Analysis Batch: 29172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-6	Bottom Hole 2	Total/NA	Solid	8021B	28904
880-16439-8	Bottom Hole 3	Total/NA	Solid	8021B	28904
880-16439-9	Bottom Hole 3	Total/NA	Solid	8021B	28904
MB 880-28904/5-A	Method Blank	Total/NA	Solid	8021B	28904
LCS 880-28904/1-A	Lab Control Sample	Total/NA	Solid	8021B	28904
LCSD 880-28904/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	28904
890-2475-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	28904
890-2475-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	28904

#### Analysis Batch: 29173

Lab Sample ID 880-16439-1	Client Sample ID  Bottom Hole 1	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 29191
880-16439-2	Bottom Hole 1	Total/NA	Solid	8021B	29191
MB 880-29191/5-A	Method Blank	Total/NA	Solid	8021B	29191

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Released to Imaging: 11/21/2022 10:02:00 AM

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

# GC VOA (Continued)

#### **Analysis Batch: 29173 (Continued)**

Lab Sam	ple ID Client Sa	ample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-	-29191/1-A Lab Con	trol Sample	Total/NA	Solid	8021B	29191
LCSD 88	0-29191/2-A Lab Con	trol Sample Dup	Total/NA	Solid	8021B	29191
880-1655	7-A-5-E MS Matrix S	oike	Total/NA	Solid	8021B	29191
880-1655	7-A-5-F MSD Matrix S	pike Duplicate	Total/NA	Solid	8021B	29191

#### Prep Batch: 29191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-1	Bottom Hole 1	Total/NA	Solid	5035	
880-16439-2	Bottom Hole 1	Total/NA	Solid	5035	
MB 880-29191/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29191/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29191/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-16557-A-5-E MS	Matrix Spike	Total/NA	Solid	5035	
880-16557-A-5-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Analysis Batch: 29192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-1	Bottom Hole 1	Total/NA	Solid	Total BTEX	
880-16439-2	Bottom Hole 1	Total/NA	Solid	Total BTEX	
880-16439-3	Bottom Hole 1	Total/NA	Solid	Total BTEX	
880-16439-4	Bottom Hole 1	Total/NA	Solid	Total BTEX	
880-16439-5	Bottom Hole 1	Total/NA	Solid	Total BTEX	
880-16439-6	Bottom Hole 2	Total/NA	Solid	Total BTEX	
880-16439-7	Bottom Hole 2	Total/NA	Solid	Total BTEX	
880-16439-8	Bottom Hole 3	Total/NA	Solid	Total BTEX	
880-16439-9	Bottom Hole 3	Total/NA	Solid	Total BTEX	
880-16439-10	Bottom Hole 4	Total/NA	Solid	Total BTEX	

#### Prep Batch: 29325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-29325/5-A	Method Blank	Total/NA	Solid	5035	

### Analysis Batch: 29358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-2	Bottom Hole 1	Total/NA	Solid	8021B	29360
MB 880-29325/5-A	Method Blank	Total/NA	Solid	8021B	29325
MB 880-29360/5-A	Method Blank	Total/NA	Solid	8021B	29360
LCS 880-29360/1-A	Lab Control Sample	Total/NA	Solid	8021B	29360
LCSD 880-29360/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29360
880-16698-A-11-E MS	Matrix Spike	Total/NA	Solid	8021B	29360
880-16698-A-11-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29360

#### Prep Batch: 29360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-2	Bottom Hole 1	Total/NA	Solid	5035	
MB 880-29360/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29360/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29360/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-16698-A-11-E MS	Matrix Spike	Total/NA	Solid	5035	
880-16698-A-11-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

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Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

### GC Semi VOA

#### Analysis Batch: 28713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-1	Bottom Hole 1	Total/NA	Solid	8015B NM	28738
880-16439-2	Bottom Hole 1	Total/NA	Solid	8015B NM	28738
880-16439-3	Bottom Hole 1	Total/NA	Solid	8015B NM	28738
880-16439-4	Bottom Hole 1	Total/NA	Solid	8015B NM	28738
880-16439-5	Bottom Hole 1	Total/NA	Solid	8015B NM	28738
880-16439-6	Bottom Hole 2	Total/NA	Solid	8015B NM	28738
880-16439-7	Bottom Hole 2	Total/NA	Solid	8015B NM	28738
880-16439-8	Bottom Hole 3	Total/NA	Solid	8015B NM	28738
880-16439-9	Bottom Hole 3	Total/NA	Solid	8015B NM	28738
880-16439-10	Bottom Hole 4	Total/NA	Solid	8015B NM	28738
MB 880-28738/1-A	Method Blank	Total/NA	Solid	8015B NM	28738
LCS 880-28738/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	28738
LCSD 880-28738/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	28738
890-2471-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	28738
890-2471-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	28738

#### Prep Batch: 28738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-1	Bottom Hole 1	Total/NA	Solid	8015NM Prep	
880-16439-2	Bottom Hole 1	Total/NA	Solid	8015NM Prep	
880-16439-3	Bottom Hole 1	Total/NA	Solid	8015NM Prep	
880-16439-4	Bottom Hole 1	Total/NA	Solid	8015NM Prep	
880-16439-5	Bottom Hole 1	Total/NA	Solid	8015NM Prep	
880-16439-6	Bottom Hole 2	Total/NA	Solid	8015NM Prep	
880-16439-7	Bottom Hole 2	Total/NA	Solid	8015NM Prep	
880-16439-8	Bottom Hole 3	Total/NA	Solid	8015NM Prep	
880-16439-9	Bottom Hole 3	Total/NA	Solid	8015NM Prep	
880-16439-10	Bottom Hole 4	Total/NA	Solid	8015NM Prep	
MB 880-28738/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-28738/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-28738/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2471-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2471-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### **Analysis Batch: 28880**

Released to Imaging: 11/21/2022 10:02:00 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-1	Bottom Hole 1	Total/NA	Solid	8015 NM	
880-16439-2	Bottom Hole 1	Total/NA	Solid	8015 NM	
880-16439-3	Bottom Hole 1	Total/NA	Solid	8015 NM	
880-16439-4	Bottom Hole 1	Total/NA	Solid	8015 NM	
880-16439-5	Bottom Hole 1	Total/NA	Solid	8015 NM	
880-16439-6	Bottom Hole 2	Total/NA	Solid	8015 NM	
880-16439-7	Bottom Hole 2	Total/NA	Solid	8015 NM	
880-16439-8	Bottom Hole 3	Total/NA	Solid	8015 NM	
880-16439-9	Bottom Hole 3	Total/NA	Solid	8015 NM	
880-16439-10	Bottom Hole 4	Total/NA	Solid	8015 NM	

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Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

### HPLC/IC

### Leach Batch: 28870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-1	Bottom Hole 1	Soluble	Solid	DI Leach	
880-16439-2	Bottom Hole 1	Soluble	Solid	DI Leach	
880-16439-3	Bottom Hole 1	Soluble	Solid	DI Leach	
880-16439-4	Bottom Hole 1	Soluble	Solid	DI Leach	
880-16439-5	Bottom Hole 1	Soluble	Solid	DI Leach	
MB 880-28870/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-28870/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-28870/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-16437-A-14-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-16437-A-14-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

#### Leach Batch: 28872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-6	Bottom Hole 2	Soluble	Solid	DI Leach	
880-16439-7	Bottom Hole 2	Soluble	Solid	DI Leach	
880-16439-8	Bottom Hole 3	Soluble	Solid	DI Leach	
880-16439-9	Bottom Hole 3	Soluble	Solid	DI Leach	
880-16439-10	Bottom Hole 4	Soluble	Solid	DI Leach	
MB 880-28872/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-28872/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-28872/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-16439-6 MS	Bottom Hole 2	Soluble	Solid	DI Leach	
880-16439-6 MSD	Bottom Hole 2	Soluble	Solid	DI Leach	

#### Analysis Batch: 29129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-1	Bottom Hole 1	Soluble	Solid	300.0	28870
880-16439-2	Bottom Hole 1	Soluble	Solid	300.0	28870
880-16439-3	Bottom Hole 1	Soluble	Solid	300.0	28870
880-16439-4	Bottom Hole 1	Soluble	Solid	300.0	28870
880-16439-5	Bottom Hole 1	Soluble	Solid	300.0	28870
MB 880-28870/1-A	Method Blank	Soluble	Solid	300.0	28870
LCS 880-28870/2-A	Lab Control Sample	Soluble	Solid	300.0	28870
LCSD 880-28870/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	28870
880-16437-A-14-B MS	Matrix Spike	Soluble	Solid	300.0	28870
880-16437-A-14-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	28870

#### Analysis Batch: 29132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16439-6	Bottom Hole 2	Soluble	Solid	300.0	28872
880-16439-7	Bottom Hole 2	Soluble	Solid	300.0	28872
880-16439-8	Bottom Hole 3	Soluble	Solid	300.0	28872
880-16439-9	Bottom Hole 3	Soluble	Solid	300.0	28872
880-16439-10	Bottom Hole 4	Soluble	Solid	300.0	28872
MB 880-28872/1-A	Method Blank	Soluble	Solid	300.0	28872
LCS 880-28872/2-A	Lab Control Sample	Soluble	Solid	300.0	28872
LCSD 880-28872/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	28872
880-16439-6 MS	Bottom Hole 2	Soluble	Solid	300.0	28872
880-16439-6 MSD	Bottom Hole 2	Soluble	Solid	300.0	28872

Job ID: 880-16439-1

#### Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Lab Sample ID: 880-16439-1 **Client Sample ID: Bottom Hole 1** 

Date Collected: 06/28/22 10:00 Matrix: Solid Date Received: 06/29/22 12:51

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 29191 Total/NA Prep 5.00 g 5 mL 07/07/22 10:17 EL XEN MID 8021B Total/NA Analysis 100 5 mL 5 mL 29173 07/07/22 20:39 MR XEN MID Total/NA Analysis Total BTEX 29192 07/07/22 10:19 AJ XEN MID 1 Total/NA 8015 NM 28880 XEN MID Analysis 1 07/01/22 13:31 SM Total/NA 8015NM Prep 28738 06/30/22 10:13 XEN MID Prep 10.01 g 10 mL DM Total/NA Analysis 8015B NM 5 28713 07/01/22 04:58 SM XEN MID Soluble DI Leach 5.01 g 50 mL 28870 07/01/22 13:07 SMC XEN MID Leach Soluble Analysis 300.0 10 29129 07/07/22 10:01 СН XEN MID

Client Sample ID: Bottom Hole 1

Lab Sample ID: 880-16439-2 Date Collected: 06/28/22 10:02 **Matrix: Solid** 

Date Received: 06/29/22 12:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	29191	07/07/22 10:17	EL	XEN MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	29173	07/07/22 20:59	MR	XEN MID
Total/NA	Prep	5035			4.98 g	5 mL	29360	07/09/22 14:01	MR	XEN MID
Total/NA	Analysis	8021B		500	5 mL	5 mL	29358	07/10/22 11:12	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			29192	07/07/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			28880	07/01/22 13:31	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	28738	06/30/22 10:13	DM	XEN MID
Total/NA	Analysis	8015B NM		5			28713	07/01/22 05:19	SM	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	28870	07/01/22 13:07	SMC	XEN MID
Soluble	Analysis	300.0		5			29129	07/07/22 10:11	CH	XEN MID

**Client Sample ID: Bottom Hole 1** 

Date Collected: 06/28/22 10:04

Date Received: 06/29/22 12:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	29048	07/05/22 13:34	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29109	07/06/22 18:03	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			29192	07/07/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			28880	07/01/22 13:31	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	28738	06/30/22 10:13	DM	XEN MID
Total/NA	Analysis	8015B NM		1			28713	07/01/22 03:11	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	28870	07/01/22 13:07	SMC	XEN MID
Soluble	Analysis	300.0		1			29129	07/07/22 10:20	CH	XEN MID

**Eurofins Midland** 

Lab Sample ID: 880-16439-3

Matrix: Solid

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

**Client Sample ID: Bottom Hole 1** 

Date Collected: 06/28/22 10:06 Date Received: 06/29/22 12:51

Lab Sample ID: 880-16439-4

Matrix: Solid

Job ID: 880-16439-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29048	07/05/22 13:34	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29109	07/06/22 18:23	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			29192	07/07/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			28880	07/01/22 13:31	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	28738	06/30/22 10:13	DM	XEN MID
Total/NA	Analysis	8015B NM		1			28713	07/01/22 03:54	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	28870	07/01/22 13:07	SMC	XEN MID
Soluble	Analysis	300.0		1			29129	07/07/22 11:45	CH	XEN MID

**Client Sample ID: Bottom Hole 1** 

Date Collected: 06/28/22 10:08

Date Received: 06/29/22 12:51

Lab Sample ID: 880-16439-5

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	29048	07/05/22 13:34	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29109	07/06/22 18:44	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			29192	07/07/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			28880	07/01/22 13:31	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	28738	06/30/22 10:13	DM	XEN MID
Total/NA	Analysis	8015B NM		1			28713	07/01/22 04:15	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	28870	07/01/22 13:07	SMC	XEN MID
Soluble	Analysis	300.0		1			29129	07/07/22 11:54	CH	XEN MID

Client Sample ID: Bottom Hole 2

Date Collected: 06/28/22 10:10

Date Received: 06/29/22 12:51

Lab Sample	ID: 880-16439-6
------------	-----------------

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	28904	07/01/22 15:28	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	29172	07/07/22 14:45	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			29192	07/07/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			28880	07/01/22 13:31	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	28738	06/30/22 10:13	DM	XEN MID
Total/NA	Analysis	8015B NM		1			28713	07/01/22 06:45	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	28872	07/01/22 13:09	SMC	XEN MID
Soluble	Analysis	300.0		10			29132	07/07/22 10:31	CH	XEN MID

Client Sample ID: Bottom Hole 2

Date Collected: 06/28/22 10:12

Date Received: 06/29/22 12:51

Lab Sample ID:	880-16439-7
	Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	5035			4.99 g	5 mL	29048	07/05/22 13:34	EL	XEN MID	
Total/NA	Analysis	8021B		1	5 mL	5 mL	29109	07/06/22 19:04	AJ	XEN MID	
Total/NA	Analysis	Total BTEX		1			29192	07/07/22 10:19	AJ	XEN MID	

**Eurofins Midland** 

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Job ID: 880-16439-1

XEN MID

**Matrix: Solid** 

**Matrix: Solid** 

Client: Etech Environmental & Safety Solutions

Analysis

300.0

Project/Site: BSWU #3 CTB

Lab Sample ID: 880-16439-7 Client Sample ID: Bottom Hole 2

Date Collected: 06/28/22 10:12 Date Received: 06/29/22 12:51

Matrix: Solid

CH

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8015 NM Analysis 28880 07/01/22 13:31 SM XEN MID Total/NA Prep 8015NM Prep 10.00 g 10 mL 28738 06/30/22 10:13 DM XEN MID Total/NA Analysis 8015B NM 28713 07/01/22 04:37 SM XEN MID 1 DI Leach Soluble 28872 07/01/22 13:09 SMC XEN MID Leach 5.02 g 50 mL

Client Sample ID: Bottom Hole 3 Lab Sample ID: 880-16439-8

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29132

07/07/22 02:40

Date Collected: 06/28/22 10:14 Date Received: 06/29/22 12:51

Soluble

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	28904	07/01/22 15:28	MR	XEN MID
Total/NA	Analysis	8021B		200	5 mL	5 mL	29172	07/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			29192	07/07/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			28880	07/01/22 13:31	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	28738	06/30/22 10:13	DM	XEN MID
Total/NA	Analysis	8015B NM		5			28713	07/01/22 05:41	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	28872	07/01/22 13:09	SMC	XEN MID
Soluble	Analysis	300.0		5			29132	07/07/22 02:48	CH	XEN MID

**Client Sample ID: Bottom Hole 3** Lab Sample ID: 880-16439-9

Date Collected: 06/28/22 10:16 Date Received: 06/29/22 12:51

	Batch	Batch		Dil		Final	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	5035			5.02 g	5 mL	28904	07/01/22 15:28	MR	XEN MID	
Total/NA	Analysis	8021B		100	5 mL	5 mL	29172	07/07/22 15:06	AJ	XEN MID	
Total/NA	Analysis	Total BTEX		1			29192	07/07/22 10:19	AJ	XEN MID	
Total/NA	Analysis	8015 NM		1			28880	07/01/22 13:31	SM	XEN MID	
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	28738	06/30/22 10:13	DM	XEN MID	
Total/NA	Analysis	8015B NM		5			28713	07/01/22 06:02	SM	XEN MID	
Soluble	Leach	DI Leach			4.96 g	50 mL	28872	07/01/22 13:09	SMC	XEN MID	
Soluble	Analysis	300.0		5			29132	07/07/22 02:56	CH	XEN MID	

Client Sample ID: Bottom Hole 4

Lab Sample ID: 880-16439-10 Date Collected: 06/28/22 10:18 **Matrix: Solid** 

Date Received: 06/29/22 12:51

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	29048	07/05/22 13:34	EL	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	29109	07/06/22 21:07	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			29192	07/07/22 10:19	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			28880	07/01/22 13:31	SM	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		5	10.01 g	10 mL	28738 28713	06/30/22 10:13 07/01/22 06:23	DM SM	XEN MID XEN MID

**Eurofins Midland** 

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### Lab Chronicle

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Lab Sample ID: 880-16439-10

Client Sample ID: Bottom Hole 4
Date Collected: 06/28/22 10:18

Matrix: Solid

Job ID: 880-16439-1

Date Received: 06/29/22 12:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	28872	07/01/22 13:09	SMC	XEN MID
Soluble	Analysis	300.0		5			29132	07/07/22 03:04	CH	XEN MID

#### Laboratory References:

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

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# **Accreditation/Certification Summary**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

#### **Laboratory: Eurofins Midland**

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

Authority Texas		ogram	Identification Number	<b>Expiration Date</b>	
		ELAP	T104704400-22-24	06-30-23	
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w	
the agency does not of	• '	,	od by the governing datherity. The list his	ay molade analytes for w	
the agency does not of Analysis Method	• '	Matrix	Analyte	ay morade analytes for w	
9 ,	fer certification.	•	, , ,		

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## **Method Summary**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

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

#### **Protocol References:**

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

#### Laboratory References:

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

**Eurofins Midland** 

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## **Sample Summary**

Client: Etech Environmental & Safety Solutions

Project/Site: BSWU #3 CTB

Job ID: 880-16439-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-16439-1	Bottom Hole 1	Solid	06/28/22 10:00	06/29/22 12:51	0-6"
880-16439-2	Bottom Hole 1	Solid	06/28/22 10:02	06/29/22 12:51	6-12"
880-16439-3	Bottom Hole 1	Solid	06/28/22 10:04	06/29/22 12:51	18-24"
880-16439-4	Bottom Hole 1	Solid	06/28/22 10:06	06/29/22 12:51	30-36"
880-16439-5	Bottom Hole 1	Solid	06/28/22 10:08	06/29/22 12:51	42-48"
880-16439-6	Bottom Hole 2	Solid	06/28/22 10:10	06/29/22 12:51	0-6"
880-16439-7	Bottom Hole 2	Solid	06/28/22 10:12	06/29/22 12:51	6-12"
880-16439-8	Bottom Hole 3	Solid	06/28/22 10:14	06/29/22 12:51	0-6"
880-16439-9	Bottom Hole 3	Solid	06/28/22 10:16	06/29/22 12:51	6-12"
880-16439-10	Bottom Hole 4	Solid	06/28/22 10:18	06/29/22 12:51	0-6"

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# **Chain of Custody**

Work Order No: \_\_\_

Midland TX (432-704-5440) EL Paso TX (915)585-3443 Lubbock TX (806)794-1296		1	١	
Hobbs NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta GA (770-449-8800) Tampa FL (813-620-2000)	www xenco com	Page	( of	

V	ENCC	•				C	nai	n o	T C	ust	oay						1	Nork	Orde	er No	o: <u>1643°</u>	1	22
	EN CELE				1,TX (281) 240-42																		/20
			l falala		d TX (432-704-54							-	•										7/11/2022
Project Manager	Brandon Wilso	n	RODOS	NIVI (5/5-392	2-7550) Phoenix,		0-355-0	900) A	tlanta G	A (770	-449-88	300) Ta	mpa F	L (813-	620-200	00)			xenco		· · · · · · · · · · · · · · · · · · ·	of	
	Etech Environr				Bill to (if differe						<del></del>										omments		1
Company Name	···		***************************************		Company Na	ne	<u></u>							$\dashv$	l				RP E	Brown	fields RRC Supe	rfund —	
Address	13000 W CR 1				Address		ļ							_	l	ite of	•			1		п	
City, State ZIP	Odessa, Texas	3 /9765			City, State ZII		l							_		-					UST TRRP—Leve	il IV	
Phone	432-563-2200			Email	blake@etecl	nenv d	com								Delive	rables	EDD			ADaPT	Other	j	
Project Name	BSWU #3 CTE	3		Ţ	urn Around		. 150,000000				A۱	IALYS	SIS R	EQUE	ST						Work Order N	lotes	
Project Number	16187			Rou	tine																		
O Number	16187			Rus	h																		
Sampler's Name	Blake Estep			Due	Date																		
SAMPLE RECI	<b>EIPT</b> Ţen	np Blank	Yes No	Wet Ice	(Yes No																		
Femperature (°C) 5.3√5 \			Thermometer ID											ĺ									
Received Intact.	(Yes	No			Dl8	Containers																İ	
Cooler Custody Sea				ction Factor		ပိ		e e	(E300)												TAT starts the day rec	evied by the	
Sample Custody Se	eals Yes No	o 165A	Tota	l Containers	.84.	er o	15N	3021	1 - 1												lab if received by		37
Sample Ide	ntification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (8015M)	BTEX (8021B)	Chloride												Sample Comr	nents	36 of
Bottom	Hole 1	S	6/28/2022	10 00	0-6"	1	Х	Х	Х														Page
Bottom	Hole 1	S	6/28/2022	10 02	6-12"	1	Х	Х	Х														Pa
Bottom	Hole 1	S	6/28/2022	10 04	18-24"	1	Х	Х	Х							1111							
Bottom	Hole 1	S	6/28/2022	10 06	30-36"	1	Х	Х	Х														
Bottom	Hole 1	S	6/28/2022	10 08	42-48"	1	Х	Х	Х														
Bottom	Hole 2	S	6/28/2022	10 10	0-6"	1	Х	Х	Х							88		9 Chai	n of Cu	ustody			
Bottom	Hole 2	S	6/28/2022	10 12	6-12"	1	Х	Х	Х									3		,			
Bottom	Hole 3	S	6/28/2022	10 14	0-6"	1	Х	Х	Х			_											5
Bottom	Hole 3	S	6/28/2022	10 16	6-12"	1	Х	Х	Х														] }
Bottom	Hole 4	S	6/28/2022	10 18	0-6"	1	Х	Х	Х														
								**********						<del></del>							***************************************		a •

Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn TCLP/SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 Hg

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

9	Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
3	1	1 livere	6/29/202	2		
t by	3		V	4		
ive	5		1351	6		

Released to Imaging: 11/21/2022 10:02:00 AM

## **Login Sample Receipt Checklist**

Client: Etech Environmental & Safety Solutions

Job Number: 880-16439-1

Login Number: 16439 List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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

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	Page 69 of	<i>70</i>
Incident ID	nAPP2216550022	
District RP		
Facility ID		
Application ID		

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation points</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
Extents of contamination must be fully delineated.
Contamination does not cause an imminent risk to human health, the environment, or groundwater.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: Amy Barnhill Title: Water Advisor
Signature: Date: 7-27-22
email: ABarnhid@chevron.com Telephone: 432-687-7108
OCD Only
Received by: Jocelyn Harimon Date: 11/21/2022
☐ Approved ☐ Approved ☐ Deferral Approved ☐ Deferral Approved
Signature: Robert Hamlet Date: 11/21/2022

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

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

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

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

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

CONDITIONS

Action 129083

#### **CONDITIONS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	129083
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards for site assessment/characterization/proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Confirmation samples should be collected every 200 ft2. The work will need to occur in 90 days after the work plan has been approved.	11/21/2022
	samples should be collected every 200 ftz. The work will need to occur in 30 days after the work plan has been approved.	