

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Robert Hamlet Date: 1/27/2022

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

Closure Approved by: Robert Hamlet Date: 1/27/2022

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

SITE INFORMATION

Report Type: Closure Report nRM2007640658

General Site Information:

Site:	Riser 7					
Company:	EOG Resources					
Section, Township and Range	Unit D	Sec. 21	T 24S	R 33E		
County:	Lea County					
GPS:	32.2094			-103.583300		

Release Data:

Date Released:	2/24/2020
Type Release:	Produced Water
Source of Contamination:	Victaulic Clamp on Pump
Fluid Released:	1,100 bbls PW
Fluids Recovered:	280 bbls PW

Official Communication:

Name:	James Kennedy		Clair Gonzales
Company:	EOG Resources		Tetra Tech
Address:	5509 Champions Drive		901 West Wall Street
			Suite 100
City:	Midland Texas, 79706		Midland, Texas
Phone number:	(432) 258-4346		(432) 685-4559
Fax:			
Email:	James.Kennedy@eogresources.com		Clair.Gonzales@TetraTech.com

Site Characterization

Depth to Groundwater:	>55' Below Surface
Karst Potential	Low

Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	10,000 mg/kg



September 13, 2021

Oil Conservation Division
1220 South St. Francis Drive
Sante Fe, New Mexico, 87505

**Re: Closure Report for the EOG Resources (EOG), Riser 7, Unit D, Section 21, Township 24 South, Range 33 East, Lea County, New Mexico.
nRM2007640658**

To Whom it may Concern:

EOG Resources contacted Tetra Tech, Inc. (Tetra Tech) to assess a release that occurred at the Riser 7, Unit D, Section 21, Township 24 South, Range 33 East, Lea County, New Mexico (Site). The spill site coordinates are 32.209400°, -103.583300°. The site location is shown in Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the release occurred on February 24, 2020, and released approximately one thousand one hundred (1,100) barrels of produced water due to a victaulic clamp on the pump developing a hole. Vacuum trucks were used to remove the freestanding fluids, recovering approximately two hundred and eighty (280) barrels of produced water. The release occurred at the riser and then ran along a two-track dirt road along the buried EOG pipeline, impacting an area measuring approximately 1,083' x 30'. The initial C-141 form is included in Appendix A.

Site Characterization

A site characterization was performed for the site; no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, and wetlands incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. The site is in a low karst potential area.

The nearest well is listed on the USGS National Water Information System in Section 21, approximately 0.05 miles southeast of the site, and has a reported depth to groundwater of 97 feet below the surface from 1986. The groundwater data is shown in Appendix B.

Tetra Tech

901 West Wall St, Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com



Depth to Water Determination

On August 11, 2020, Scarborough Drilling, Inc was onsite to drill a groundwater determination borehole to 55' below ground surface and within a ½ mile radius of the location. The borehole was left open for 72 hours, and checked borehole for the presence of groundwater. No water was detected at 55' below surface. The borehole coordinates are 32.209104 -103.582489. The driller log is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the site following the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, the proposed RRAL, beyond the top 4.0' of soil, for TPH is 2,500 mg/kg (GRO + DRO + MRO) and 1,000 mg/kg (GRO + DRO). Additionally, based on the site characterization, beyond the top 4.0' of soil, the proposed RRAL for chlorides is 10,000 mg/kg.

Soil Assessment and Analytical Results

On April 4, 2020, Tetra Tech personnel were onsite to evaluate and sample the release area. Prior to sampling the area, buried EOG lines within the release area were verified. Seventeen (17) auger holes (AH-1 through AH-17) were installed in the release area to total depths ranging from 0-1' to 4.5' below the surface. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The auger hole locations are shown in Figure 3.

Auger holes

Referring to Table 1, none of the samples analyzed showed benzene, total BTEX, or TPH concentrations above the laboratory reporting limits. The auger holes (AH-1, and AH-12 through AH-17) showed chloride concentrations under 600 mg/kg. However, the chloride concentrations detected in the areas of auger holes (AH-2 through AH-11) were above the RRALs, with exceeding chloride concentrations ranging from 759 mg/kg to 8,430 mg/kg.



Remediation Activities

Based on the soil assessment results, Tetra Tech personnel were onsite July 27, 2020, through August 7, 2020, to supervise the remediation activities and collect confirmation samples. After verifying the location of the EOG buried lines, the release areas were excavated to depths ranging from 1.0' to 6.0' below the surface, as shown on Figures 4A, 4B, and Table 2.

A total of sixty-nine (69) bottom holes (Bottom Hole-1 through Bottom Hole-69) and fifty-six (56) sidewall samples (SW-1 through SW-56) were collected every 200 square feet to ensure proper removal of impacted soils. Additionally, five (5) internal sidewalls (ISW-1 through ISW-5) were collected below the EOG buried high pressure water line at a depth ranging from 4.0'-6.0' below surface for documentation purposes, these samples showed concentrations below RRALs. The samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 2. The excavation depths and confirmation sample locations are shown on Figures 4A and 4B.

Referring to Table 2, all final confirmation samples collected showed benzene, total BTEX, TPH, and chloride concentrations below the RRAL's and the reclamation standards. The area of sidewalls (SW-26 through SW-40) showed chloride concentrations above the RRALs. Those areas were excavated an additional 0.5' to 1.0' to remove the impacted soils.

Approximately 4,340 cubic yards of material were excavated and transported offsite for proper disposal. The area was then backfilled with clean material to surface grade.

Conclusion

Based on the laboratory results and remediation activities performed, EOG requests closure of this spill issue. The final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or remediation activities for this site, please call (432) 682-4559

Respectfully submitted,
TETRA TECH

A handwritten signature in blue ink, appearing to read 'Brittany Long'.

Brittany Long,
Project Manager

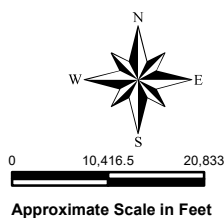
A handwritten signature in blue ink, appearing to read 'Clair Gonzales'.

Clair Gonzales, P.G.
Senior Project Manager

Figures



SITE LOCATION



OVERVIEW MAP

HEART THROB / RISER No. 7

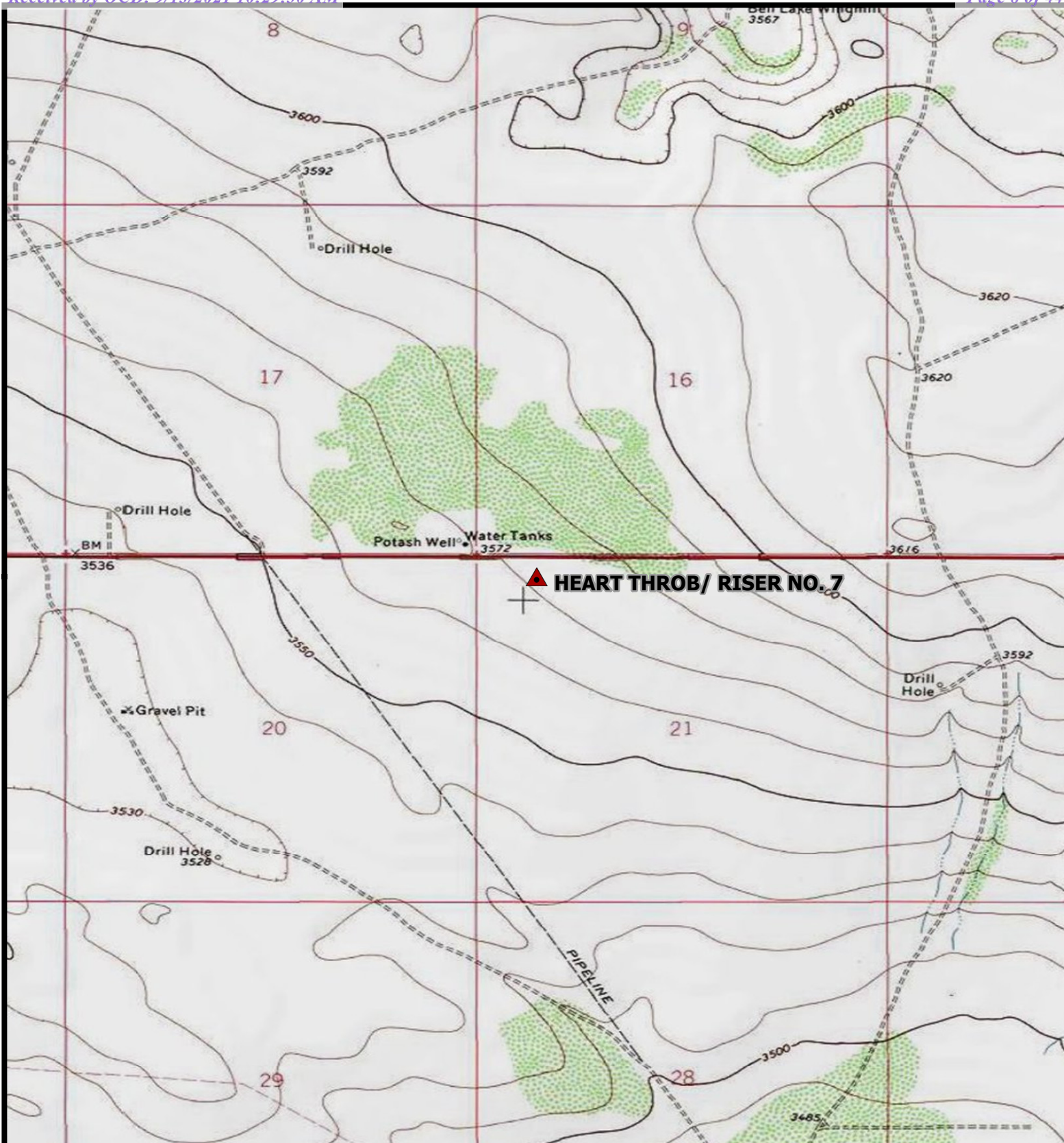
Property Located at coordinates 32.209400°, -103.583300°
LEA COUNTY, NEW MEXICO

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

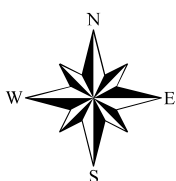


Project #: 212C-MD-02149
Date: 04-14-2020
Drawn By: MLM

FIGURE
1



SITE LOCATION



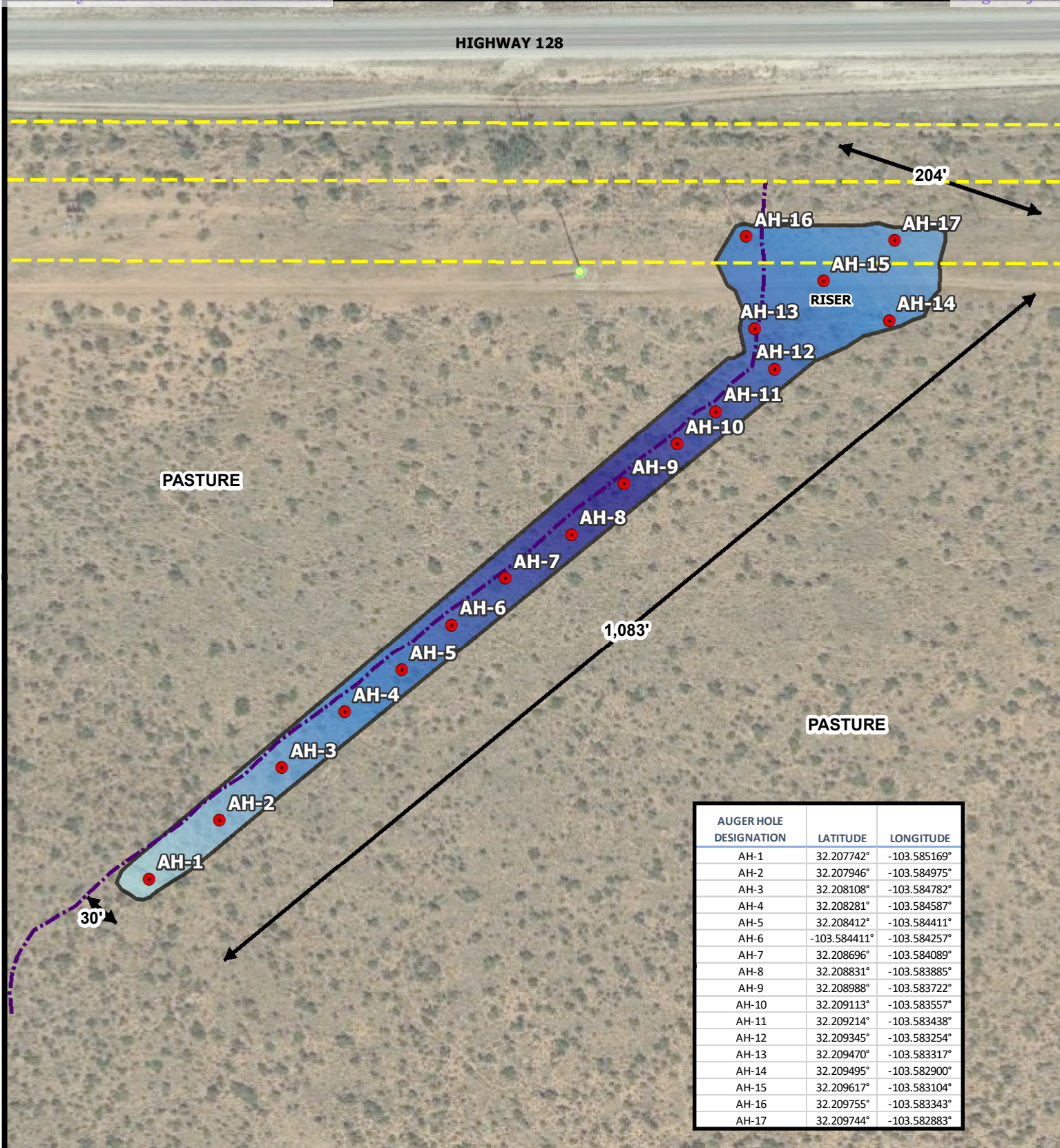
0 1,000 2,000
Approximate Scale in Feet

TOPOGRAPHIC MAP
HEART THROB / RISER No. 7
Property Located at coordinates 32.209400°, -103.583300°
LEA COUNTY, NEW MEXICO

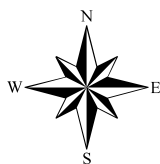


Project #: 212C-MD-02149
Date: 04-14-2020
Drawn By: MLM

FIGURE
2



- AUGERHOLE LOCATIONS
- POWERPOLE
- EOG HIGH PRESSURE WATER LINE
- O.H. POWER LINES
- AFFECTED SPILL AREA



0 75 150
Approximate Scale in Feet

Source: "New Mexico". 32°12'33.84"N, 103°34'59.88"W. Google Earth.
November 02, 2017; 4/14/20.

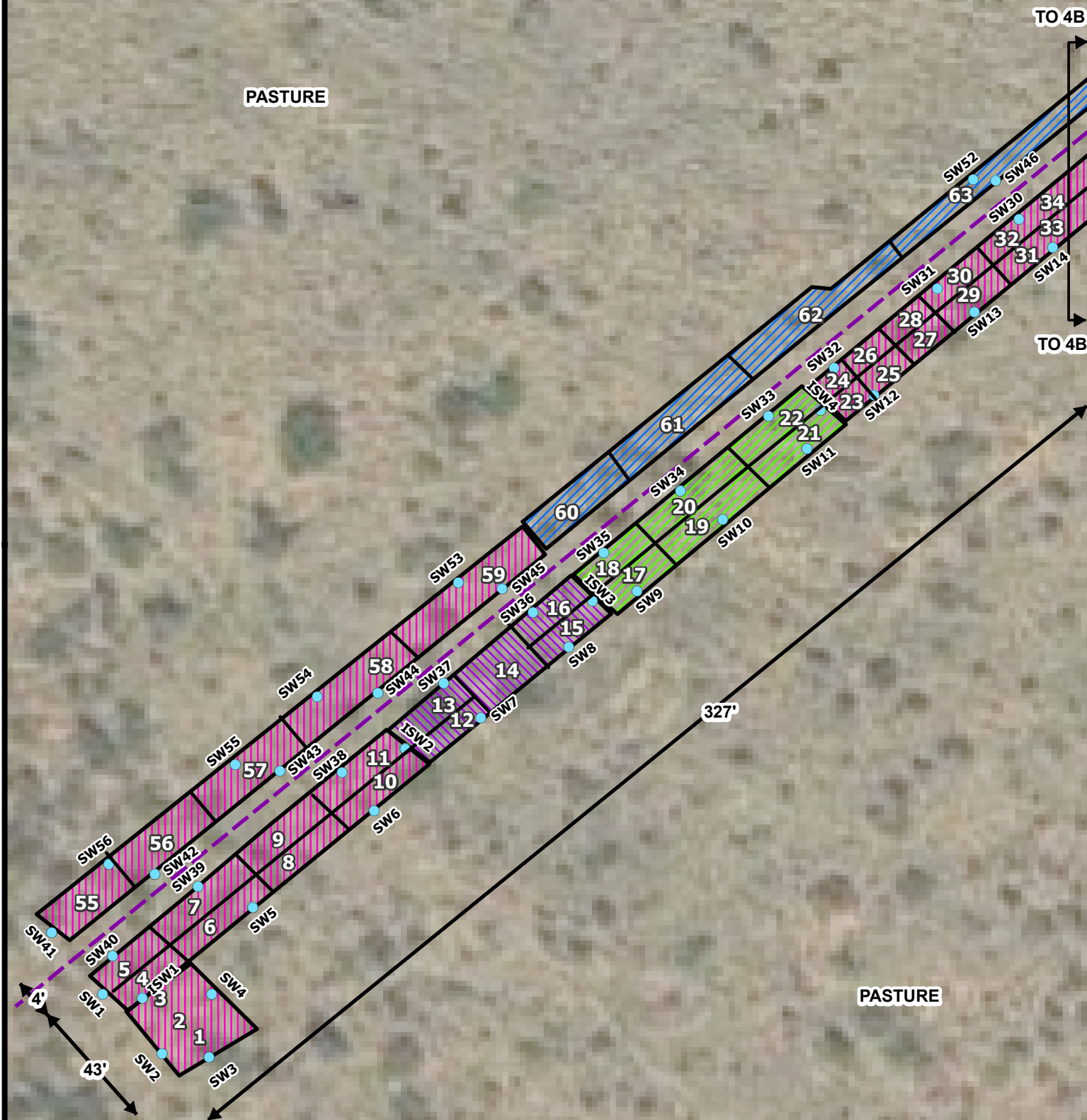
SPILL ASSESSMENT MAP RISER No. 7

Property Located at coordinates 32.209400°, -103.583300°
LEA COUNTY, NEW MEXICO

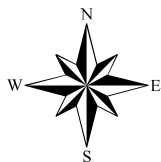


Project #: 212C-MD-02149
Date: 08-14-2020
Drawn By: MLM

FIGURE
3



- SIDEWALL SAMPLE LOCATIONS
- 1-34 BOTTOM HOLE SAMPLE LOCATIONS
- 55-63
- EOG HIGH PRESSURE WATER LINE
- 1.0' EXCAVATED DEPTH
- 4.5' EXCAVATED DEPTH
- 5.0' EXCAVATED DEPTH
- 6.0' EXCAVATED DEPTH



0 20 40
Approximate Scale in Feet

Source: "New Mexico". 32°12'33.84"N, 103°34'59.88"W. Google Earth.
November 02, 2017; 4/14/20.

EXCAVATION AREA & DEPTH MAP HEART THROB & RISER No. 7

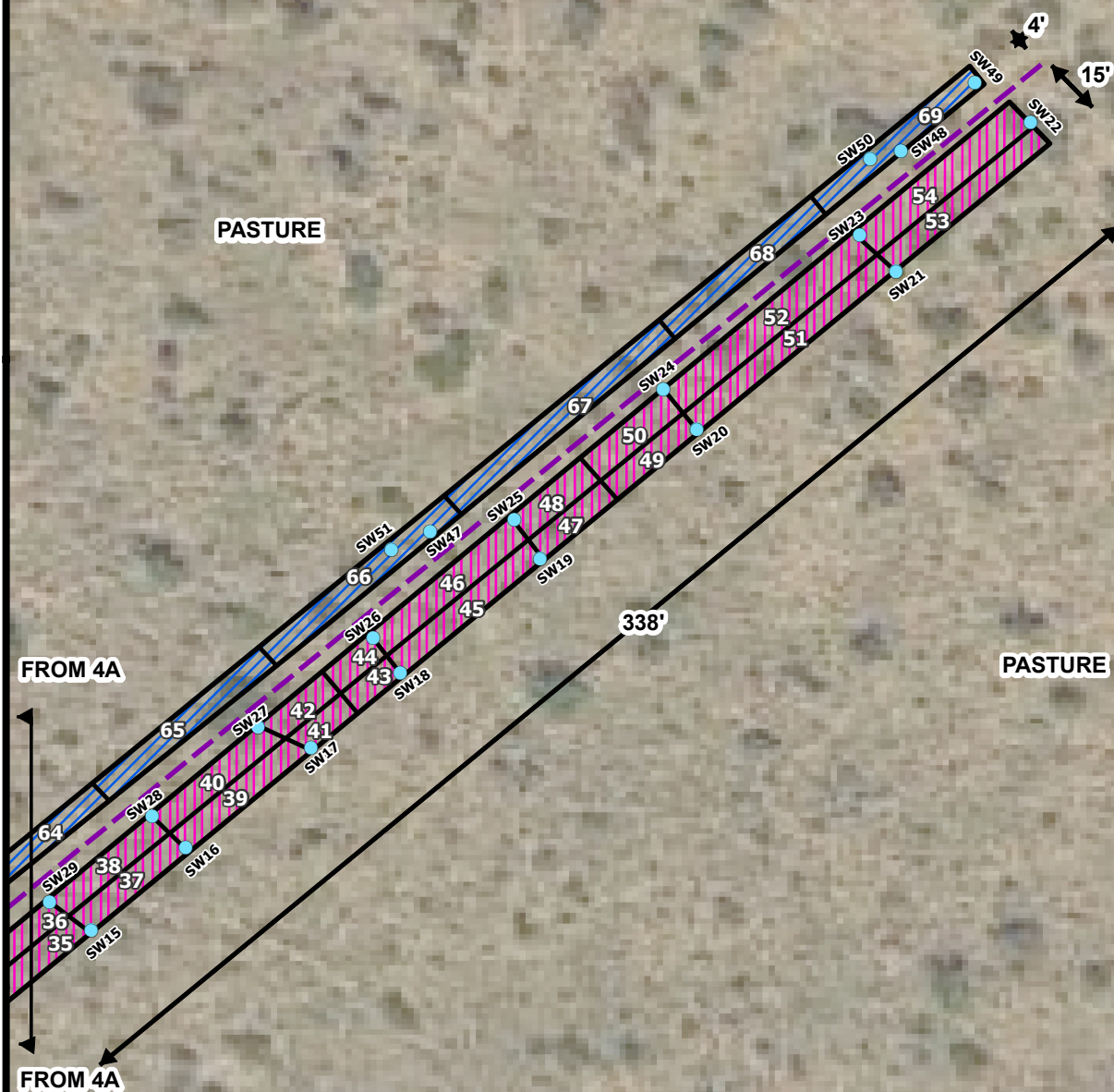
Property Located at coordinates 32.209400°, -103.583300°
LEA COUNTY, NEW MEXICO



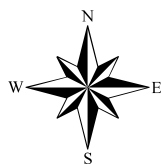
Project #: 212C-MD-02149
Date: 08-11-2020
Drawn By: MLM

FIGURE
4A

RISER •



- SIDEWALL SAMPLE LOCATIONS
- 35-54 BOTTOM HOLE SAMPLE LOCATIONS
- 64-69 EOG HIGH PRESSURE WATER LINE
- 1.0' EXCAVATED DEPTH
- 4.5' EXCAVATED DEPTH
- 5.0' EXCAVATED DEPTH
- 6.0' EXCAVATED DEPTH



0 25 50
Approximate Scale in Feet

Source: "New Mexico". 32°12'33.84"N, 103°34'59.88"W. Google Earth.
November 02, 2017, 4/14/20.

EXCAVATION AREA & DEPTH MAP HEART THROB & RISER No. 7

Property Located at coordinates 32.209400°, -103.583300°
LEA COUNTY, NEW MEXICO



Project #: 212C-MD-02149
Date: 08-11-2020
Drawn By: MLM

FIGURE
4B

Tables

Table 1
EOG Resources
Heart Throb to Riser 7
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	MRO	Total						
AH-1	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<5.05
	"	1-1.5	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<4.96
	"	2-2.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<5.00
AH-2	4/7/2020	0-1	-	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	39.7
	"	1-1.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,510
	"	2-2.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6,350
AH-3	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	272
	"	1-1.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	4,950
	"	2-2.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	4,750
	"	3-3.5	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	8,430
	"	4-4.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4,310
AH-4	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	2,400
	"	1-1.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5,170
	"	2-2.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5,670
AH-5	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,340
	"	1-1.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5,790
	"	2-2.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	4,670
	"	3-3.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	4,410
	"	4-4.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	3,010
AH-6	4/7/2020	0-1	-	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	2,480
	"	1-1.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4,120
	"	2-2.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	3,340
	"	3-3.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	3,810
AH-7	4/7/2020	0-1	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	80.9
	"	1-1.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	76.4
	"	2-2.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	759
AH-8	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	91.1
	"	1-1.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	1,590
	"	2-2.5	-	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	1,380
	"	3-3.5	-	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	2,180

Table 1
EOG Resources
Heart Throb to Riser 7
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	MRO	Total						
AH-9	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	4,160
	"	1-1.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	5,600
	"	2-2.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	4,510
	"	3-3.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	3,910
AH-10	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	3,930
	"	1-1.5	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5,870
	"	2-2.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	8,320
AH-11	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	716
	"	1-1.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	2,030
AH-12	4/7/2020	0-1	-	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	12.1
	"	1-1.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	8.06
AH-13	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	7.91
	"	1-1.5	-	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<5.04
AH-14	4/7/2020	0-1	-	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<4.98
	"	1-1.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<5.03
AH-15	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<5.05
	"	1-1.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<5.04
AH-16	4/7/2020	0-1	-	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<4.98
	"	1-1.5	-	X		<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	10.2
	"	2-2.5	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5.81
AH-17	4/7/2020	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<4.98
	"	1-1.5	-	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<5.00

(-) Not Analyzed

Excavated

Table 2
EOG Resources
Heart Throb to Riser 7
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB Sample	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	MRO	Total						
Bottom Hole 1	8/6/2020	-	4.0	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	16.7
Bottom Hole 2	8/6/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	31.4
Bottom Hole 3	8/6/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	24.5
Bottom Hole 4	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	20.6
Bottom Hole 5	8/6/2020	-	4.5	X		<50.1	<50.1	<50.1	<50.1	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	43.0
Bottom Hole 6	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	7,200
Bottom Hole 7	8/6/2020	-	4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	6,130
Bottom Hole 8	8/6/2020	-	4.5	X		<50.2	<50.2	<50.2	<50.2	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	7,210
Bottom Hole 9	8/6/2020	-	4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	6,550
Bottom Hole 10	8/6/2020	-	4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	6,910
Bottom Hole 11	8/6/2020	-	4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	7,450
Bottom Hole 12	8/6/2020	-	5.0	X		<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,200
Bottom Hole 13	8/6/2020	-	5.0	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,010
Bottom Hole 14	8/6/2020	-	5.0	X		<50.3	<50.3	<50.3	<50.3	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,250
Bottom Hole 15	8/6/2020	-	5.0	X		<50.2	<50.2	<50.2	<50.2	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	782
Bottom Hole 16	8/6/2020	-	5.0	X		<50.1	<50.1	<50.1	<50.1	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	967
Bottom Hole 17	8/6/2020	-	6.0	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	1,100
Bottom Hole 18	8/6/2020	-	6.0	X		<50.3	<50.3	<50.3	<50.3	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1,460
Bottom Hole 19	8/6/2020	-	6.0	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,630
Bottom Hole 20	8/6/2020	-	6.0	X		<50.2	<50.2	<50.2	<50.2	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1,800
Bottom Hole 21	8/6/2020	-	6.0	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,560
Bottom Hole 22	8/6/2020	-	6.0	X		<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	1,820
Bottom Hole 23	8/6/2020	-	4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,680
Bottom Hole 24	8/6/2020	-	4.5	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6,510
Bottom Hole 25	8/6/2020	-	4.5	X		<50.2	<50.2	<50.2	<50.2	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	5,860
Bottom Hole 26	8/6/2020	-	4.5	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5,300

Table 2
EOG Resources
Heart Throb to Riser 7
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB Sample	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	MRO	Total						
Bottom Hole 27	8/6/2020	-	4.5	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6,190
Bottom Hole 28	8/6/2020	-	4.5	X		<50.3	<50.3	<50.3	<50.3	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,920
Bottom Hole 29	8/6/2020	-	4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1,410
Bottom Hole 30	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	1,920
Bottom Hole 31	8/6/2020	-	4.5	X		<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,860
Bottom Hole 32	8/6/2020	-	4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	5,840
Bottom Hole 33	8/6/2020	-	4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4,700
Bottom Hole 34	8/6/2020	-	4.5	X		<50.1	<50.1	<50.1	<50.1	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	5,570
Bottom Hole 35	8/6/2020	-	4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6,490
Bottom Hole 36	8/6/2020	-	4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5,690
Bottom Hole 37	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	6,290
Bottom Hole 38	8/6/2020	-	4.5	X		<50.3	<50.3	<50.3	<50.3	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	3,080
Bottom Hole 39	8/6/2020	-	4.5	X		<50.1	<50.1	<50.1	<50.1	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	3,300
Bottom Hole 40	8/6/2020	-	4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,960
Bottom Hole 41	8/6/2020	-	4.5	X		<50.2	<50.2	<50.2	<50.2	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	4,450
Bottom Hole 42	8/6/2020	-	4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4,040
Bottom Hole 43	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	3,900
Bottom Hole 44	8/6/2020	-	4.5	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6,520
Bottom Hole 45	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	6,400
Bottom Hole 46	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	6,610
Bottom Hole 47	8/6/2020	-	4.5	X		<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	6,780
Bottom Hole 48	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5,750
Bottom Hole 49	8/6/2020	-	4.5	X		<50.3	<50.3	<50.3	<50.3	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	6,130
Bottom Hole 50	8/6/2020	-	4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	5,420
Bottom Hole 51	8/6/2020	-	4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,610
Bottom Hole 52	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,380
Bottom Hole 53	8/6/2020	-	4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	1,800

Table 2
EOG Resources
Heart Throb to Riser 7
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB Sample	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	MRO	Total						
Bottom Hole 54	8/6/2020	-	4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	23.5
Bottom Hole 55	8/6/2020	-	4.5	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	13.9
Bottom Hole 56	8/6/2020	-	4.5	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	14.6
Bottom Hole 57	8/6/2020	-	4.5	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	14.8
Bottom Hole 58	8/6/2020	-	4.5	X		<50.2	<50.2	<50.2	<50.2	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	10.8
Bottom Hole 59	8/6/2020	-	4.5	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<9.92
Bottom Hole 60	8/6/2020	-	1.0	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	11.0
Bottom Hole 61	8/6/2020	-	1.0	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<10.0
Bottom Hole 62	8/6/2020	-	1.0	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<10.0
Bottom Hole 63	8/6/2020	-	1.0	X		<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<9.98
Bottom Hole 64	8/6/2020	-	1.0	X		<50.1	<50.1	<50.1	<50.1	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<9.92
Bottom Hole 65	8/6/2020	-	1.0	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<9.98
Bottom Hole 66	8/6/2020	-	1.0	X		<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	12.7
Bottom Hole 67	8/6/2020	-	1.0	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	10.3
Bottom Hole 68	8/6/2020	-	1.0	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<9.92
Bottom Hole 69	8/6/2020	-	1.0	X		<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	16.0
Sidewall 1	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	16.7
Sidewall 2	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	42.6
Sidewall 3	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	26.1
Sidewall 4	8/6/2020	-	-	X		<50.3	<50.3	<50.3	<50.3	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	47.2
Sidewall 5	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	32.9
Sidewall 6	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<9.92
Sidewall 7	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<9.98
Sidewall 8	8/6/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	124
Sidewall 9	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	176
Sidewall 10	8/6/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	201
Sidewall 11	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<9.88
Sidewall 12	8/6/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	12.4
Sidewall 13	8/6/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	12.1

Table 2
EOG Resources
Heart Throb to Riser 7
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB Sample	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	MRO	Total						
Sidewall 14	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	11.2
Sidewall 15	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<9.98
Sidewall 16	8/6/2020	-	-	X		<50.3	<50.3	<50.3	<50.3	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<9.90
Sidewall 17	8/6/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<9.94
Sidewall 18	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	44.2
Sidewall 19	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	29.1
Sidewall 20	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	28.7
Sidewall 21	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	41.4
Sidewall 22	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	46.2
Sidewall 23	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	263
Sidewall 24	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	354
Sidewall 25	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	339
Sidewall 26	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,400
	8/17/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	95.8
Sidewall 27	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,090
	8/17/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	64.3
Sidewall 28	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	994
	8/17/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	0.0108	<0.00200	<0.00200	0.0108	78.0
Sidewall 29	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	765
	8/17/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00198	0.00939	<0.00198	<0.00198	0.00939	65.8
Sidewall 30	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	873
	8/17/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00200	0.0108	<0.00200	<0.00200	0.0108	61.9
Sidewall 31	8/6/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,150
	8/17/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	0.0100	<0.00200	<0.00200	0.0100	138
Sidewall 32	8/6/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,050
	8/17/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	0.00893	<0.00199	<0.00199	0.00893	57.4
Sidewall 33	8/6/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	2,260
	8/17/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00199	0.0101	<0.00199	<0.00199	0.0101	69.8
Sidewall 34	8/6/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1,780
	8/17/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00198	0.0109	<0.00198	<0.00198	0.0109	90.3
Sidewall 35	8/6/2020	-	-		X	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1,210
	8/17/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00201	0.0101	<0.00201	<0.00201	0.0101	16.3
Sidewall 36	8/6/2020	-	-		X	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	1,190
	8/17/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00201	0.0116	<0.00201	<0.00201	0.0116	14.9

Table 2
EOG Resources
Heart Throb to Riser 7
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	BEB Sample	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	MRO	Total						
Sidewall 37	8/6/2020	-	-		X	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	1,230
	8/17/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00199	0.00482	<0.00199	<0.00199	0.00482	54.2
Sidewall 38	8/6/2020	-	-		X	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,100
	8/17/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00199	0.00563	<0.00199	<0.00199	0.00563	58.1
Sidewall 39	8/6/2020	-	-		X	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	976
	8/17/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00201	0.00540	<0.00201	<0.00201	0.00540	53.9
Sidewall 40	8/6/2020	-	-		X	<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,150
	8/17/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00200	0.00555	<0.00200	<0.00200	0.00555	15.8
Sidewall 41	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192	74.9
Sidewall 42	8/6/2020	-	-	X		<50.3	<50.3	<50.3	<50.3	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	52.4
Sidewall 43	8/6/2020	-	-	X		<50.3	<50.3	<50.3	<50.3	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	48.9
Sidewall 44	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	32.5
Sidewall 45	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<9.94
Sidewall 46	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<9.98
Sidewall 47	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<9.88
Sidewall 48	8/6/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<9.98
Sidewall 49	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<10.0
Sidewall 50	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	11.1
Sidewall 51	8/6/2020	-	-	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	10.8
Sidewall 52	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	10.2
Sidewall 53	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	18.4
Sidewall 54	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	13.9
Sidewall 55	8/6/2020	-	-	X		<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	16.8
Sidewall 56	8/6/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	18.4
Internal Sidewall 1	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	523
Internal Sidewall 2	8/6/2020	-	-	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	610
Internal Sidewall 3	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	2,660
Internal Sidewall 4	8/6/2020	-	-	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,850
Internal Sidewall 5	8/6/2020	-	-	X		<50.2	<50.2	<50.2	<50.2	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	11.3

(-) Not Analyzed

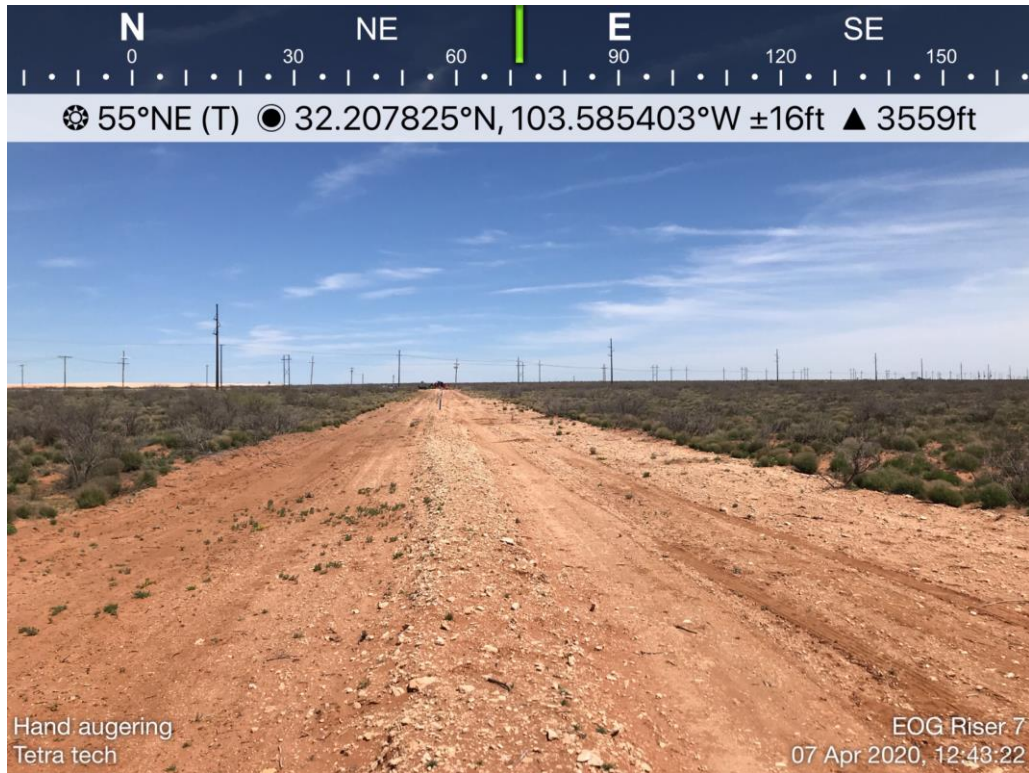
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Photos

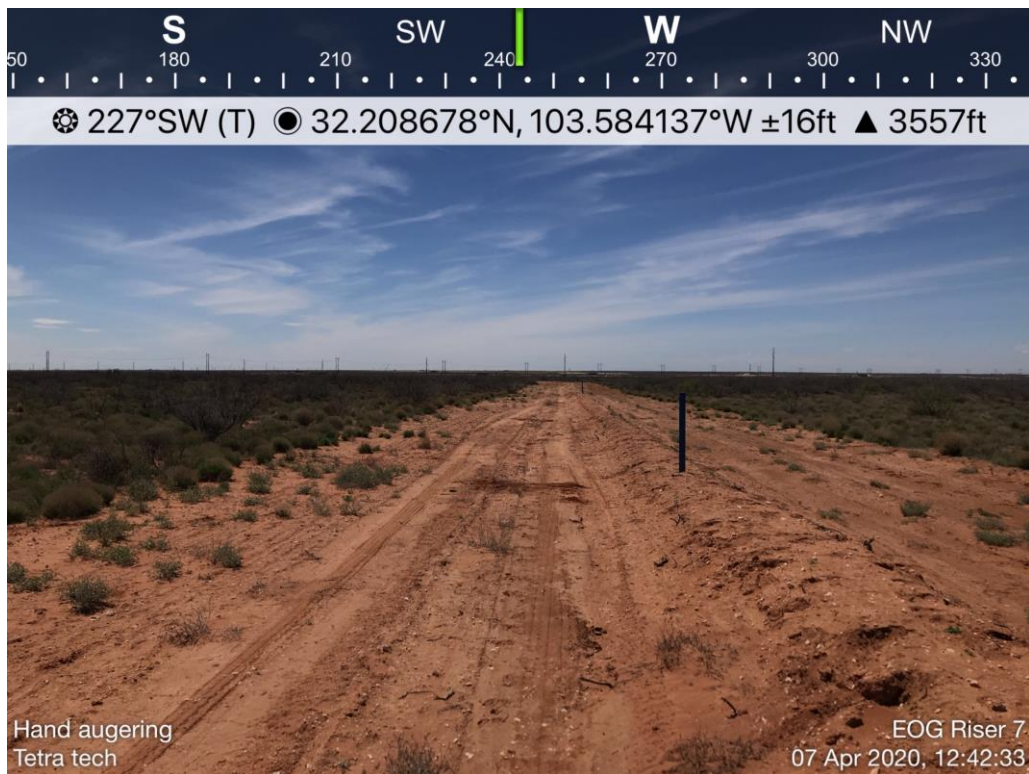
EOG Operating LLC
Heart throb to Riser No. 7
Lea County, New Mexico



TETRA TECH



View North, area of Auger holes 1 and 2



View South, area of Auger holes 6-9

EOG Operating LLC
Heart throb to Riser No. 7
Lea County, New Mexico



TETRA TECH



View South, area of Auger holes 12-17



View North, area of Auger holes 7-10

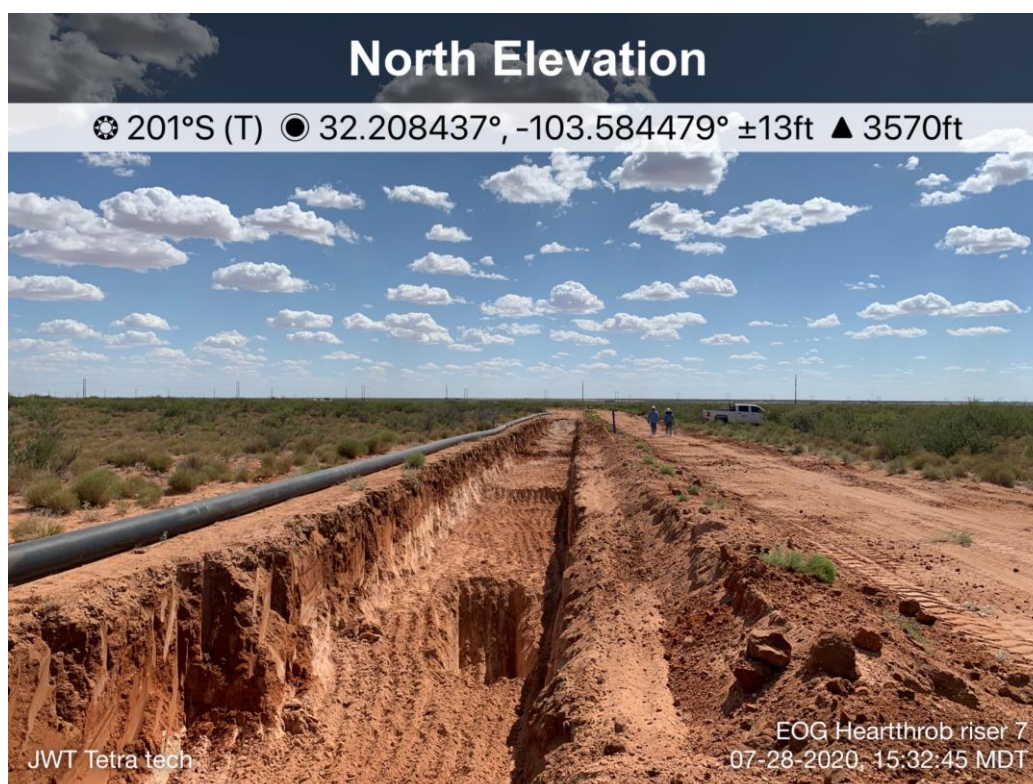
EOG Operating LLC
Heartthrob to Riser No. 7
Lea County, New Mexico



TETRA TECH



View East, area of bottom holes 1-3

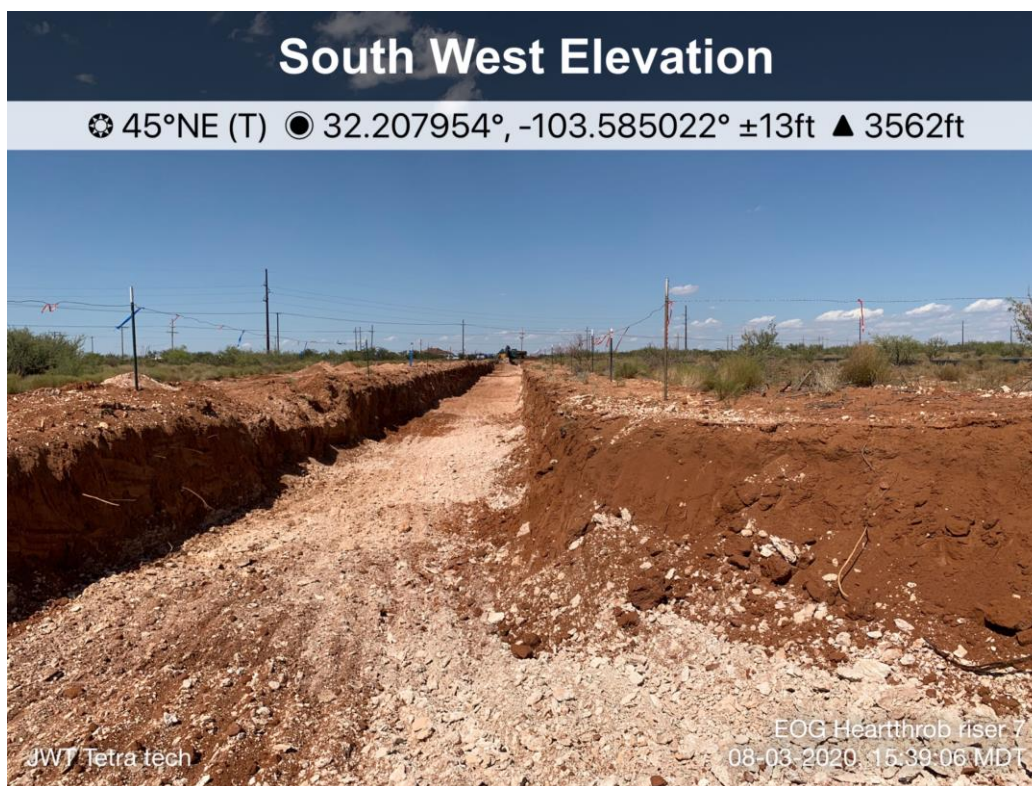


View South, area of bottom hole 4-16

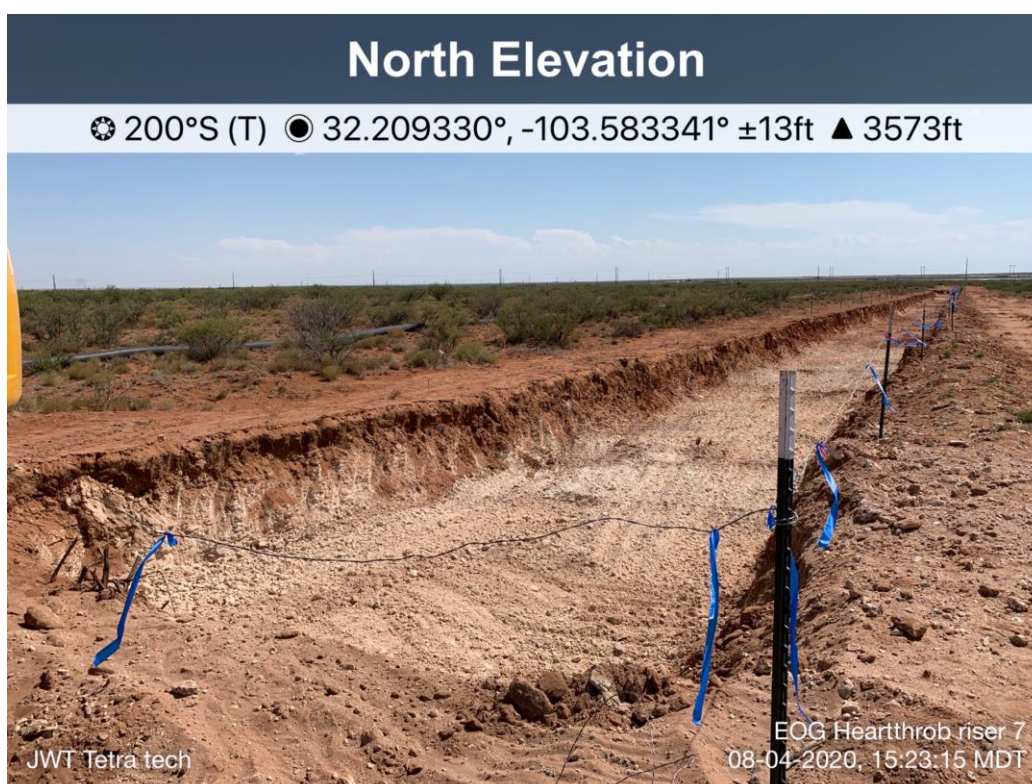
EOG Operating LLC
Heart Throb to Riser No. 7
Lea County, New Mexico



TETRA TECH



View East, area of bottom holes 7-22



View South, area of bottom hole 23-54

EOG Operating LLC
Heartthrob to Riser No. 7
Lea County, New Mexico

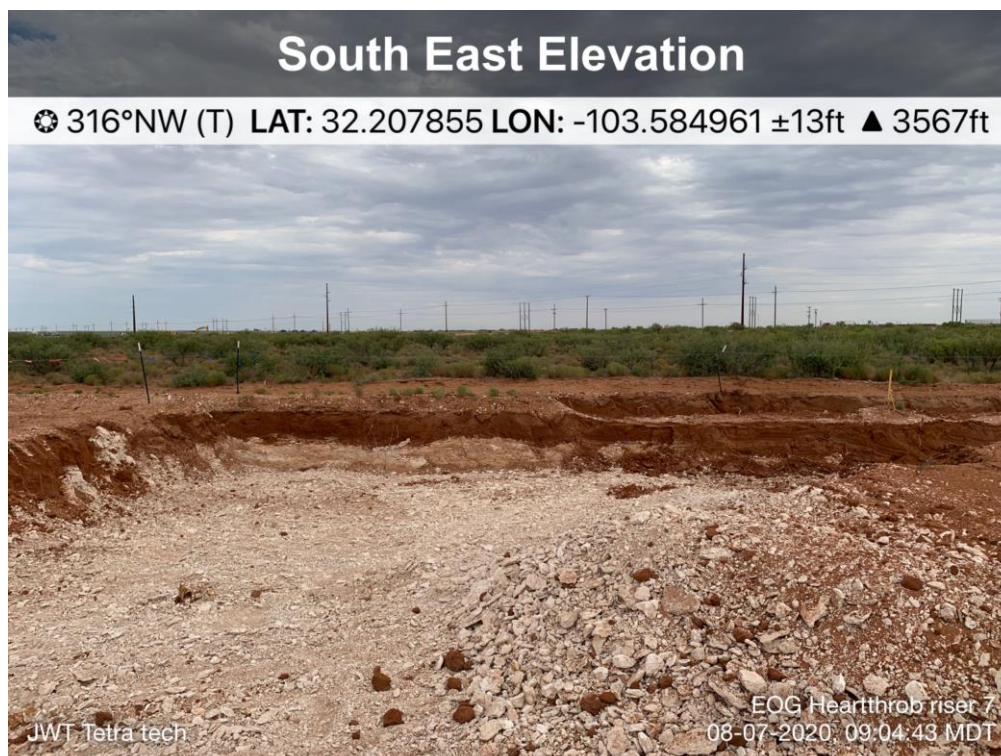


View South, north edge of finished excavation



View North, southern edge of finished excavation

EOG Operating LLC
Heartthrob to Riser No. 7
Lea County, New Mexico



View West, south edge of finished excavation

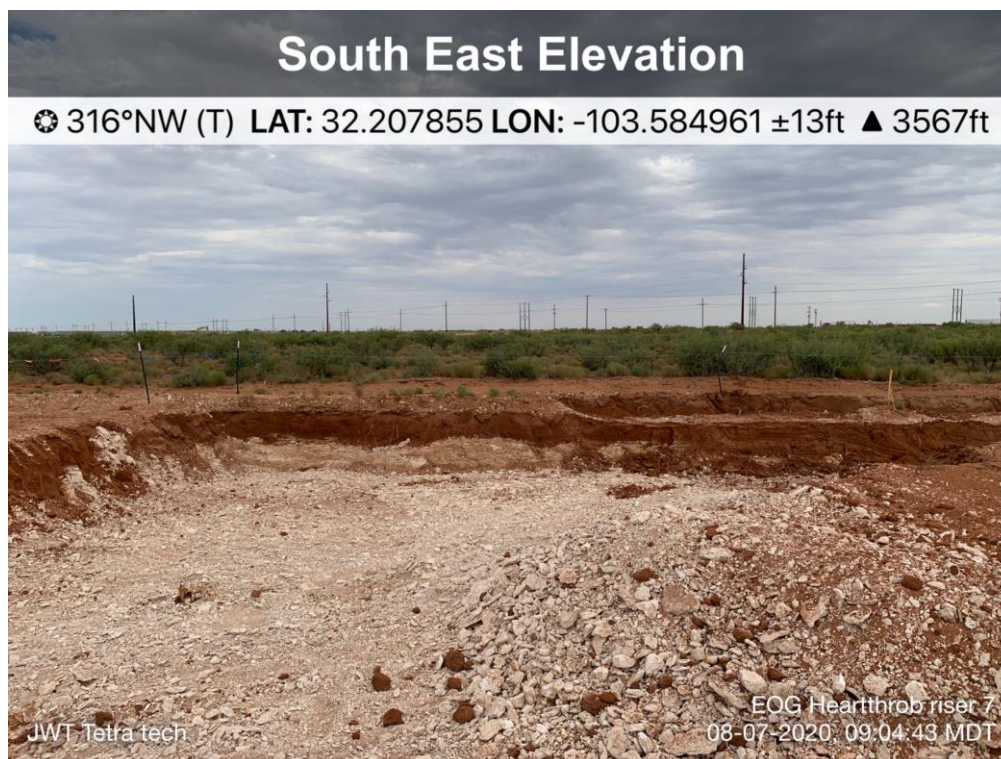


View North, area of Bottom holes 55-59

EOG Operating LLC
Heart throb to Riser No. 7
Lea County, New Mexico



TETRA TECH



View South, area of bottom holes 60-69

Appendix A

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	nRM2007640658
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources	OGRID 7377
Contact Name James Kennedy	Contact Telephone (432) 848-9146
Contact email James_Kennedy@eogresources.com	Incident nRM2007640658
Contact mailing address 5509 Champions Drive Midland, TX 79706	

Location of Release Source

Latitude 32.209400° Longitude -103.583300°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Riser 7	Site Type Reuse Water Line
Date Release Discovered 02/24/2020	API# (if applicable)

Unit Letter	Section	Township	Range	County
D	21	24S	33E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Reuse Water	Volume Released (bbls) 1,100	Volume Recovered (bbls) 280
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: While pumping from pit to pit, a vic clamp developed a minimal leak that was undetected by leak detection. Approximately 1,100 bbls of reuse water released from the line and 280 bbls was recovered.

Incident ID	nRM2007640658
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? More than 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? No	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.	
☒ The impacted area has been secured to protect human health and the environment.	
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation 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 within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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: <u>James Kennedy</u>	Title: <u>Environmental Specialist</u>
Signature: <u>James Kennedy</u>	Date: <u>3-6-20</u>
email: <u>James_Kennedy@eogresources.com</u>	Telephone: <u>(432) 848-9146</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

Incident ID	nRM2007640658
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

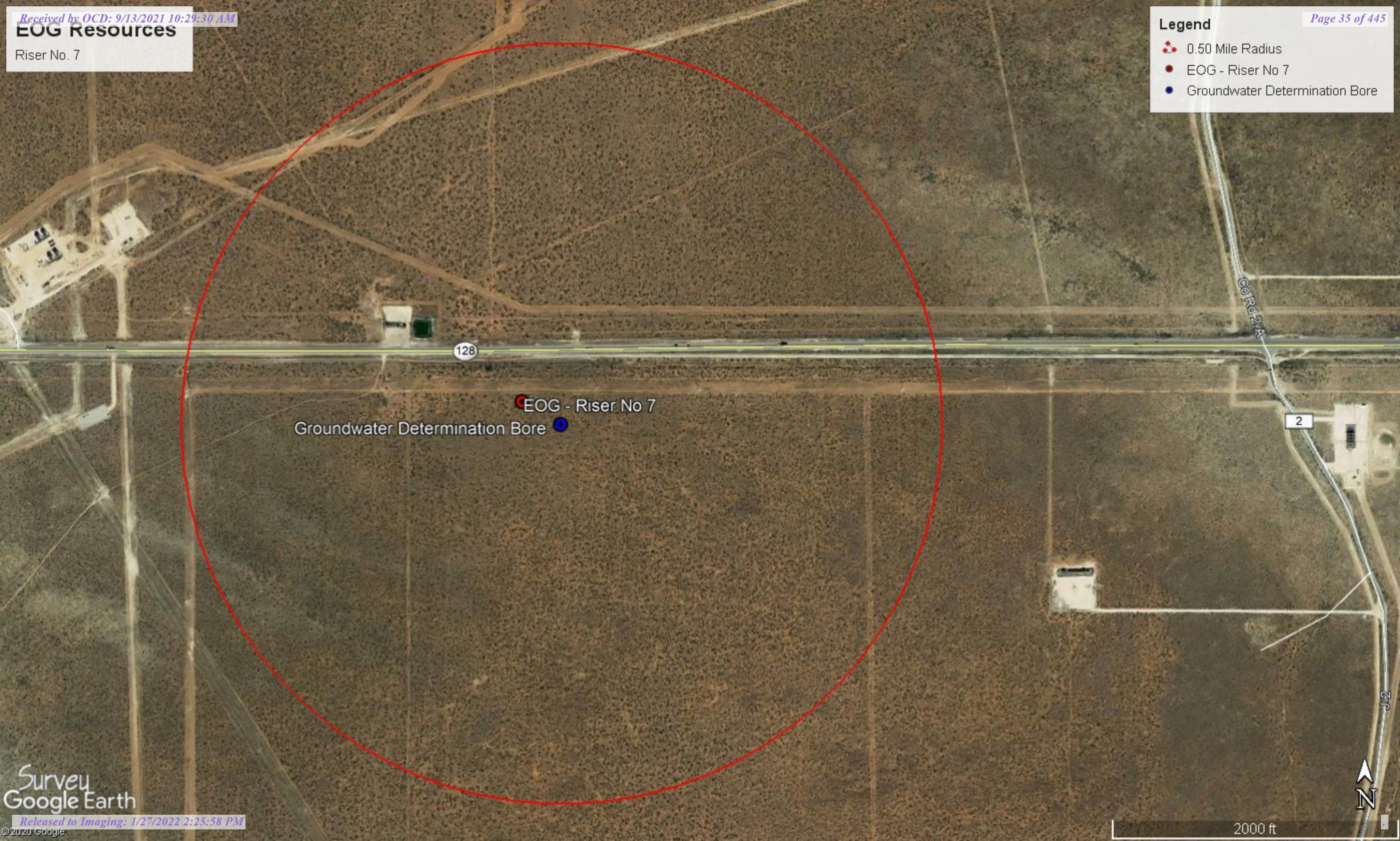
Appendix B

EOG Resources

Riser No. 7

Legend

- 0.50 Mile Radius
- EOG - Riser No 7
- Groundwater Determination Bore



EOG - Riser No 7

Groundwater Determination Bore



TEST HOLES • WATER WELLS
P.O. Box 305 - Ph. 806-872-3285 or 872-9349
LAMESA, TEXAS 79331
2001 South Hwy. 87

[illegible]

Date 8-11-20 Driller Lee Seawall

Water Well Data
Average Depth to Groundwater (ft)
EOG - Riser No. 7

23 South 32 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

23 South 33 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

23 South 34 East

6	329	5	4	3	2	1	137
7	8	255	9	10	11	12	
18	17	16	345	15	14	13	
19	20	21	22	282	23	233	24
30	29	28	27	295	26	265	25
31	32	160	33	34	35	36	

24 South 32 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South 33 East

6	5	4	3	2	1
7	8	9	10 20 22	11	12
18	17	16	15	14	13
19	20	21	22	23 208	24 16.9
30	29	28	27	26	25
31	32	33 70 93.2	34	35	36

24 South 34 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

25 South 32 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

25 South 33 East

6	5	4	3	172	2	1
7	8	9	10	11	12	
18	17	16	15	140	13	200
19	20	21	22	23	24	
30	29	28	27	26	25	
31	32	33	34	35	36	

25 South 34 East

6	5	4	3	2	1	260
7	8	9	10	11	12	
18	17	16	15	14	13	
19	20	21	22	23	24	
30	29	129	28	27	26	25
31	32	33	34	35	36	

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

121 Abandoned Waterwell (recently measured)



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

Basin/County Search:

County: Lea

PLSS Search:

Section(s): 21

Township: 24S

Range: 33E

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.

4/16/20 2:44 PM

Page 1 of 1

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:

Click to hide News Bulletins

- **Notice** - The USGS Water Resources Mission Area's priority is to maintain the safety and well-being of our communities, including providing critical situational awareness in times of flooding in all 50 U.S. states and additional territories. Our hydrologic monitoring stations continue to send data in near real-time to NWISWeb, and we are continuing critical water monitoring activities to protect life and property on a case-by-case basis. The health and safety of the public and our employees are our highest priorities, and we continue to follow guidance from the White House, the CDC, and state and local authorities.
- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 321236103350101

Minimum number of levels = 1

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

USGS 321236103350101 24S.33E.17.444414

Lea County, New Mexico

Latitude 32°12'36", Longitude 103°35'01" NAD27

Land-surface elevation 3,573 feet above NAVD88

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source o measure
1986-03-11		D	97.37			2		U		

Explanation

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

[Questions about sites/data?](#)
[Feedback on this web site](#)
[Automated retrievals](#)
[Help](#)
[Data Tips](#)
[Explanation of terms](#)
[Subscribe for system changes](#)
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[Accessibility](#) [Plug-Ins](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

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

Title: Groundwater for New Mexico: Water Levels

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



Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2020-04-16 16:22:06 EDT

0.29 0.27 nadww01



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

- **Notice** - The USGS Water Resources Mission Area's priority is to maintain the safety and well-being of our communities, including providing critical situational awareness in times of flooding in all 50 U.S. states and additional territories. Our hydrologic monitoring stations continue to send data in near real-time to NWISWeb, and we are continuing critical water monitoring activities to protect life and property on a case-by-case basis. The health and safety of the public and our employees are our highest priorities, and we continue to follow guidance from the White House, the CDC, and state and local authorities.
- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 321017103343201

Minimum number of levels = 1

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

USGS 321017103343201 24S.33E.33.23231

Lea County, New Mexico

Latitude 32°10'17", Longitude 103°34'32" NAD27

Land-surface elevation 3,475 feet above NAVD88

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source o measure
1954-03-17		D	93.15				2		U	
1976-01-22		D	92.05				2		U	
1981-03-20		D	92.81				2		U	
1986-03-11		D	94.57				2		U	
1991-06-06		D	94.62				2		U	
1996-03-01		D	94.35				2		S	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level

4/16/2020

Section	Code	Description
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

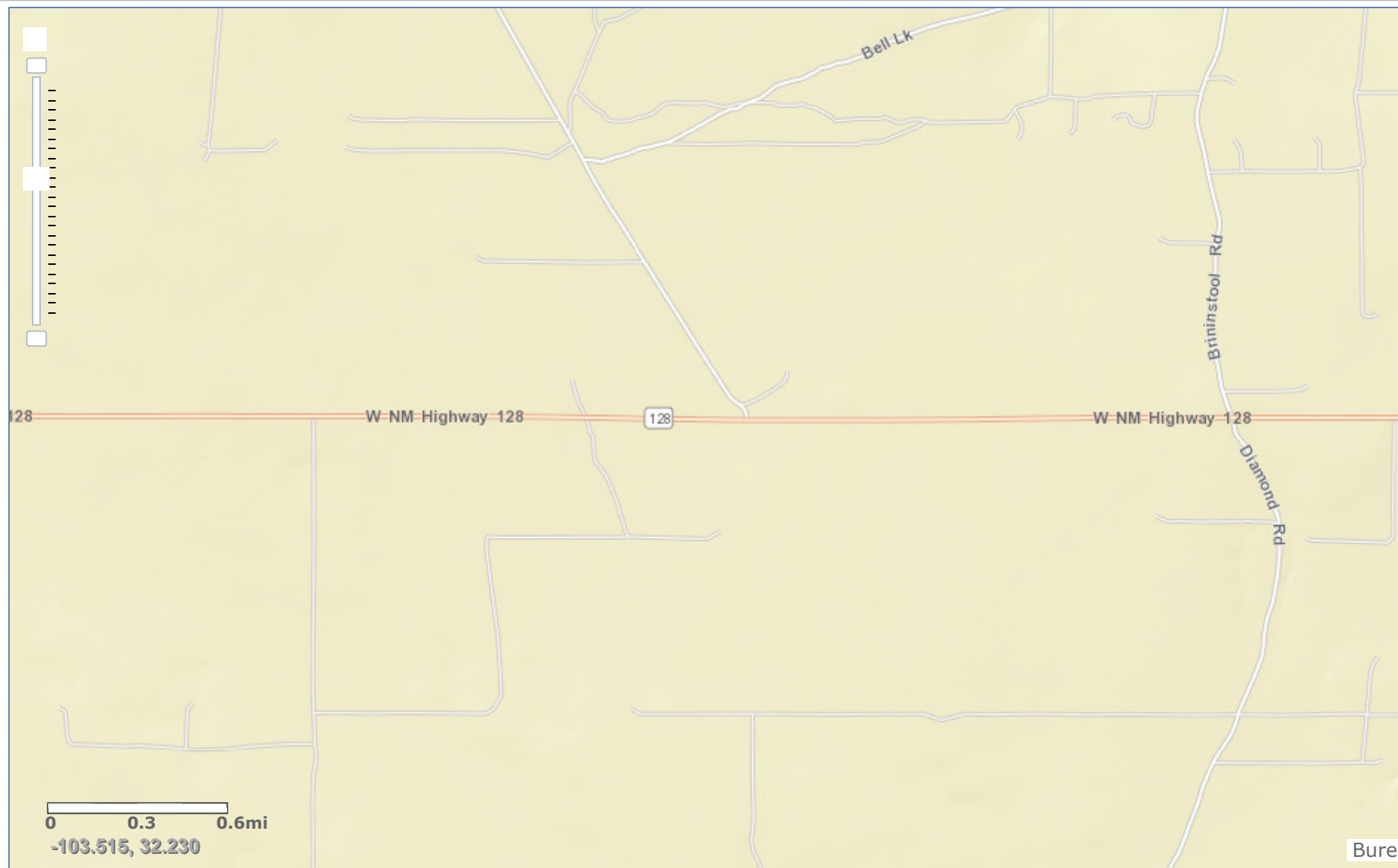
[Questions about sites/data?](#)[Feedback on this web site](#)[Automated retrievals](#)[Help](#)[Data Tips](#)[Explanation of terms](#)[Subscribe for system changes](#)[News](#)[Accessibility](#)[Plug-Ins](#)[FOIA](#)[Privacy](#)[Policies and Notices](#)[U.S. Department of the Interior](#) | [U.S. Geological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

Page Last Modified: 2020-04-16 16:26:59 EDT

0.25 0.23 nadww01



National Water Information System: Mapper



Site Information

EOG Riser No. 7

Karst Map

Legend

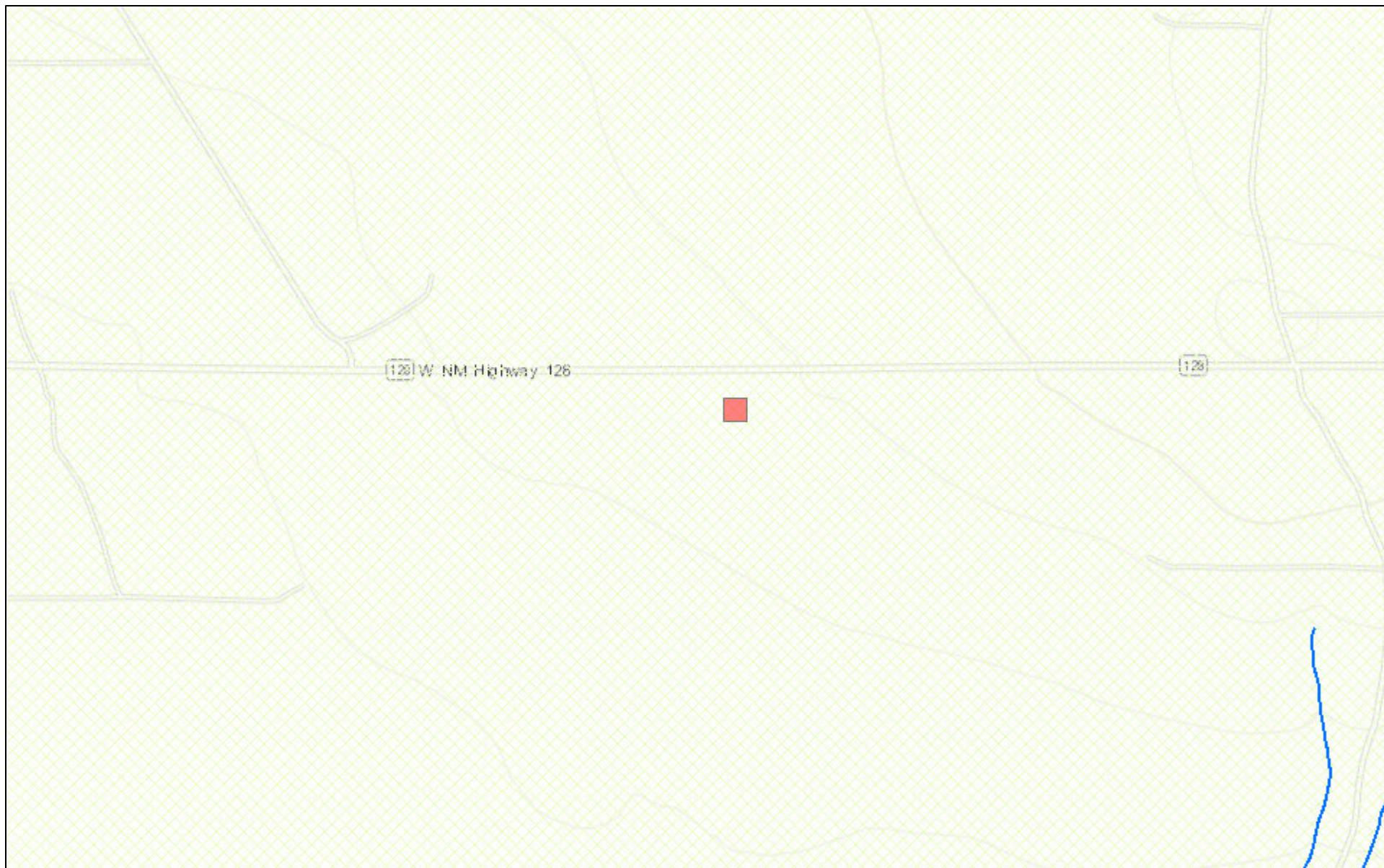
-  High
-  Low
-  Medium
-  Riser No. 7

Riser No. 7 

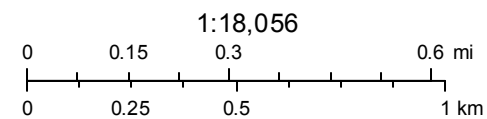
Google Earth



New Mexico NFHL Data



April 16, 2020



FEMA
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

Appendix C



Analytical Report 658342

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Riser 7

04.10.2020

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



04.10.2020

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: XENCO Report No(s): **658342**

Riser 7

Project Address: Lea County, New Mexico

Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 658342. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 658342 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'. The signature is written in a cursive, flowing style.

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 658342

Tetra Tech- Midland, Midland, TX

Riser 7

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 0-1'	S	04.07.2020 00:00		658342-001
AH-1 1'-1.5'	S	04.07.2020 00:00		658342-002
AH-1 2'-2.5'	S	04.07.2020 00:00		658342-003
AH-2 0-1'	S	04.07.2020 00:00		658342-004
AH-2 1'-1.5'	S	04.07.2020 00:00		658342-005
AH-2 2'-2.5'	S	04.07.2020 00:00		658342-006
AH-3 0-1'	S	04.07.2020 00:00		658342-007
AH-3 1'-1.5'	S	04.07.2020 00:00		658342-008
AH-3 2'-2.5'	S	04.07.2020 00:00		658342-009
AH-3 3'-3.5'	S	04.07.2020 00:00		658342-010
AH-3 4'-4.5'	S	04.07.2020 00:00		658342-011
AH-4 0-1'	S	04.07.2020 00:00		658342-012
AH-4 1'-1.5'	S	04.07.2020 00:00		658342-013
AH-4 2'-2.5'	S	04.07.2020 00:00		658342-014
AH-5 0-1'	S	04.07.2020 00:00		658342-015
AH-5 1'-1.5'	S	04.07.2020 00:00		658342-016
AH-5 2'-2.5'	S	04.07.2020 00:00		658342-017
AH-5 3'-3.5'	S	04.07.2020 00:00		658342-018
AH-5 4'-4.5'	S	04.07.2020 00:00		658342-019
AH-6 0-1'	S	04.07.2020 00:00		658342-020
AH-6 1'-1.5'	S	04.07.2020 00:00		658342-021
AH-6 2'-2.5'	S	04.07.2020 00:00		658342-022
AH-6 3'-3.5'	S	04.07.2020 00:00		658342-023
AH-7 0-1'	S	04.07.2020 00:00		658342-024
AH-7 1'-1.5'	S	04.07.2020 00:00		658342-025
AH-7 2'-2.5'	S	04.07.2020 00:00		658342-026
AH-8 0-1'	S	04.07.2020 00:00		658342-027
AH-8 1'-1.5'	S	04.07.2020 00:00		658342-028
AH-8 2'-2.5'	S	04.07.2020 00:00		658342-029
AH-8 3'-3.5'	S	04.07.2020 00:00		658342-030
AH-9 0-1'	S	04.07.2020 00:00		658342-031
AH-9 1'-1.5'	S	04.07.2020 00:00		658342-032
AH-9 2'-2.5'	S	04.07.2020 00:00		658342-033
AH-9 3'-3.5'	S	04.07.2020 00:00		658342-034
AH-10 0-1'	S	04.07.2020 00:00		658342-035
AH-10 1'-1.5'	S	04.07.2020 00:00		658342-036
AH-10 2-2.5'	S	04.07.2020 00:00		658342-037
AH-11 0-1'	S	04.07.2020 00:00		658342-038
AH-11 1-1.5'	S	04.07.2020 00:00		658342-039
AH-12 0-1'	S	04.07.2020 00:00		658342-040
AH-12 1'-1.5'	S	04.07.2020 00:00		658342-041
AH-13 0-1'	S	04.07.2020 00:00		658342-042
AH-13 1'-1.5'	S	04.07.2020 00:00		658342-043

**Sample Cross Reference 658342****Tetra Tech- Midland, Midland, TX**

Riser 7

AH-14 0-1'	S	04.07.2020 00:00	658342-044
AH-14 1'-1.5'	S	04.07.2020 00:00	658342-045
AH-15 0-1'	S	04.07.2020 00:00	658342-046
AH-15 1'-1.5'	S	04.07.2020 00:00	658342-047
AH-16 0-1'	S	04.07.2020 00:00	658342-048
AH-16 1'-1.5'	S	04.07.2020 00:00	658342-049
AH-16 2'-2.5'	S	04.07.2020 00:00	658342-050
AH-17 0-1'	S	04.07.2020 00:00	658342-051
AH-17 1'-1.5'	S	04.07.2020 00:00	658342-052



CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Riser 7

Project ID:
Work Order Number(s): 658342

Report Date: 04.10.2020
Date Received: 04.08.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3122569 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3122575 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3122619 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 658342

Tetra Tech- Midland, Midland, TX

Project Name: Riser 7

Project Id:

Date Received in Lab: Wed 04.08.2020 15:35

Contact: Mike Carmona

Report Date: 04.10.2020 16:18

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658342-001	658342-002	658342-003	658342-004	658342-005	658342-006
	<i>Field Id:</i>	AH-1 0-1'	AH-1 1'-1.5'	AH-1 2'-2.5'	AH-2 0-1'	AH-2 1'-1.5'	AH-2 2'-2.5'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B NO_CERT#	<i>Extracted:</i>	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00
	<i>Analyzed:</i>	04.09.2020 15:08	04.09.2020 15:28	04.09.2020 15:49	04.09.2020 16:09	04.09.2020 16:29	04.09.2020 16:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00400 0.00400	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45
	<i>Analyzed:</i>	04.09.2020 15:39	04.09.2020 15:55	04.09.2020 16:00	04.09.2020 16:05	04.09.2020 16:11	04.09.2020 16:26
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.05 5.05	<4.96 4.96	<5.00 5.00	39.7 4.99	1510 25.0	6350 50.4
TPH By SW8015 Mod	<i>Extracted:</i>	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00
	<i>Analyzed:</i>	04.09.2020 13:02	04.09.2020 14:08	04.09.2020 14:30	04.09.2020 14:51	04.09.2020 15:13	04.09.2020 15:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Jessica Kramer
Project Manager



Certificate of Analysis Summary 658342

Tetra Tech- Midland, Midland, TX

Project Name: Riser 7

Project Id:

Date Received in Lab: Wed 04.08.2020 15:35

Contact: Mike Carmona

Report Date: 04.10.2020 16:18

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658342-007	658342-008	658342-009	658342-010	658342-011	658342-012
	<i>Field Id:</i>	AH-3 0-1'	AH-3 1'-1.5'	AH-3 2'-2.5'	AH-3 3'-3.5'	AH-3 4'-4.5'	AH-4 0-1'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B NO_CERT#	<i>Extracted:</i>	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00
	<i>Analyzed:</i>	04.09.2020 17:10	04.09.2020 17:30	04.09.2020 17:51	04.09.2020 18:11	04.09.2020 19:33	04.09.2020 19:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45
	<i>Analyzed:</i>	04.09.2020 16:53	04.09.2020 16:32	04.09.2020 16:37	04.09.2020 16:42	04.09.2020 16:47	04.09.2020 17:09
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		272 5.03	4950 50.2	4750 49.7	8430 50.3	4310 25.2	2400 25.1
TPH By SW8015 Mod	<i>Extracted:</i>	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00
	<i>Analyzed:</i>	04.09.2020 15:57	04.09.2020 16:19	04.09.2020 16:40	04.09.2020 17:02	04.09.2020 17:45	04.09.2020 18:07
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 658342

Tetra Tech- Midland, Midland, TX

Project Name: Riser 7

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Wed 04.08.2020 15:35

Report Date: 04.10.2020 16:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658342-013	658342-014	658342-015	658342-016	658342-017	658342-018
	<i>Field Id:</i>	AH-4 1'-1.5'	AH-4 2'-2.5'	AH-5 0-1'	AH-5 1'-1.5'	AH-5 2'-2.5'	AH-5 3'-3.5'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B NO_CERT#	<i>Extracted:</i>	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 12:00
	<i>Analyzed:</i>	04.09.2020 20:13	04.09.2020 20:34	04.09.2020 20:54	04.09.2020 21:15	04.09.2020 21:35	04.09.2020 21:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
m,p-Xylenes		<0.00399 0.00399	<0.00401 0.00401	<0.00400 0.00400	<0.00399 0.00399	<0.00398 0.00398	<0.00397 0.00397
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 11:45
	<i>Analyzed:</i>	04.09.2020 17:14	04.09.2020 17:30	04.09.2020 17:35	04.09.2020 17:40	04.09.2020 17:45	04.09.2020 17:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		5170 49.7	5670 49.5	1340 24.8	5790 50.4	4670 49.8	4410 49.6
TPH By SW8015 Mod	<i>Extracted:</i>	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00
	<i>Analyzed:</i>	04.09.2020 18:28	04.09.2020 18:50	04.09.2020 19:11	04.09.2020 19:33	04.09.2020 19:54	04.09.2020 20:15
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0
Total TPH		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 658342

Tetra Tech- Midland, Midland, TX

Project Name: Riser 7

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Wed 04.08.2020 15:35

Report Date: 04.10.2020 16:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658342-019	658342-020	658342-021	658342-022	658342-023	658342-024
	<i>Field Id:</i>	AH-5 4'-4.5'	AH-6 0-1'	AH-6 1'-1.5'	AH-6 2'-2.5'	AH-6 3'-3.5'	AH-7 0-1'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B NO_CERT#	<i>Extracted:</i>	04.09.2020 12:00	04.09.2020 12:00	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35
	<i>Analyzed:</i>	04.09.2020 22:16	04.09.2020 22:36	04.10.2020 02:20	04.10.2020 02:41	04.10.2020 03:01	04.10.2020 03:22
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00400 0.00400	<0.00402 0.00402	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	04.09.2020 11:45	04.09.2020 11:45	04.09.2020 12:25	04.09.2020 12:25	04.09.2020 12:25	04.09.2020 12:25
	<i>Analyzed:</i>	04.09.2020 17:56	04.09.2020 18:01	04.09.2020 18:50	04.09.2020 18:55	04.09.2020 19:00	04.09.2020 18:33
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3010 25.0	2480 25.2	4120 25.2	3340 24.9	3810 24.8	80.9 4.95
TPH By SW8015 Mod	<i>Extracted:</i>	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00
	<i>Analyzed:</i>	04.09.2020 20:37	04.09.2020 20:58	04.09.2020 13:02	04.09.2020 14:08	04.09.2020 14:30	04.09.2020 14:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 658342

Tetra Tech- Midland, Midland, TX

Project Name: Riser 7

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Wed 04.08.2020 15:35

Report Date: 04.10.2020 16:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658342-025	658342-026	658342-027	658342-028	658342-029	658342-030
	<i>Field Id:</i>	AH-7 1'-1.5'	AH-7 2'-2.5'	AH-8 0-1'	AH-8 1'-1.5'	AH-8 2'-2.5'	AH-8 3'-3.5'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B NO_CERT#	<i>Extracted:</i>	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35
	<i>Analyzed:</i>	04.10.2020 03:42	04.10.2020 04:02	04.10.2020 04:23	04.10.2020 04:43	04.10.2020 05:04	04.10.2020 05:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201
Toluene		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201
Ethylbenzene		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201
m,p-Xylenes		<0.00403 0.00403	<0.00398 0.00398	<0.00402 0.00402	<0.00404 0.00404	<0.00396 0.00396	<0.00402 0.00402
o-Xylene		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201
Total Xylenes		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201
Total BTEX		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202	<0.00198 0.00198	<0.00201 0.00201
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	04.09.2020 08:15	04.09.2020 08:15	04.09.2020 08:15	04.09.2020 08:15	04.09.2020 08:15	04.09.2020 08:15
	<i>Analyzed:</i>	04.09.2020 09:36	04.09.2020 09:41	04.09.2020 09:57	04.09.2020 09:47	04.09.2020 09:52	04.09.2020 10:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		76.4 5.01	759 4.98	91.1 5.05	1590 24.9	1380 25.0	2180 24.9
TPH By SW8015 Mod	<i>Extracted:</i>	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00
	<i>Analyzed:</i>	04.09.2020 15:13	04.09.2020 15:35	04.09.2020 15:57	04.09.2020 16:19	04.09.2020 16:40	04.09.2020 17:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.9 49.9
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.9 49.9

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 658342

Tetra Tech- Midland, Midland, TX

Project Name: Riser 7

Project Id:

Date Received in Lab: Wed 04.08.2020 15:35

Contact: Mike Carmona

Report Date: 04.10.2020 16:18

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658342-031	658342-032	658342-033	658342-034	658342-035	658342-036
	<i>Field Id:</i>	AH-9 0-1'	AH-9 1'-1.5'	AH-9 2'-2.5'	AH-9 3'-3.5'	AH-10 0-1'	AH-10 1'-1.5'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B NO_CERT#	<i>Extracted:</i>	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35
	<i>Analyzed:</i>	04.10.2020 06:46	04.10.2020 07:06	04.10.2020 07:26	04.10.2020 07:47	04.10.2020 08:07	04.10.2020 08:28
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
m,p-Xylenes		<0.00404 0.00404	<0.00403 0.00403	<0.00398 0.00398	<0.00404 0.00404	<0.00403 0.00403	<0.00400 0.00400
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	04.09.2020 08:15	04.09.2020 08:15	04.09.2020 08:15	04.09.2020 08:15	04.09.2020 08:15	04.09.2020 08:15
	<i>Analyzed:</i>	04.09.2020 10:18	04.09.2020 10:34	04.09.2020 10:39	04.09.2020 10:45	04.09.2020 10:50	04.09.2020 10:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4160 25.2	5600 50.2	4510 24.9	3910 24.8	3930 24.8	5870 49.5
TPH By SW8015 Mod	<i>Extracted:</i>	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00
	<i>Analyzed:</i>	04.09.2020 17:45	04.09.2020 18:07	04.09.2020 18:28	04.09.2020 18:50	04.09.2020 19:11	04.09.2020 19:33
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 658342

Tetra Tech- Midland, Midland, TX

Project Name: Riser 7

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Wed 04.08.2020 15:35

Report Date: 04.10.2020 16:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658342-037	658342-038	658342-039	658342-040	658342-041	658342-042
	<i>Field Id:</i>	AH-10 2-2.5'	AH-11 0-1'	AH-11 1-1.5'	AH-12 0-1'	AH-12 1'-1.5'	AH-13 0-1'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B NO_CERT#	<i>Extracted:</i>	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 14:35	04.09.2020 16:42	04.09.2020 16:42
	<i>Analyzed:</i>	04.10.2020 08:48	04.10.2020 09:08	04.10.2020 09:29	04.10.2020 09:49	04.10.2020 00:19	04.10.2020 00:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
m,p-Xylenes		<0.00397 0.00397	<0.00400 0.00400	<0.00402 0.00402	<0.00402 0.00402	<0.00402 0.00402	<0.00402 0.00402
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	04.09.2020 08:15	04.09.2020 08:15	04.09.2020 11:20	04.09.2020 11:20	04.09.2020 11:20	04.09.2020 11:20
	<i>Analyzed:</i>	04.09.2020 11:01	04.09.2020 11:06	04.09.2020 14:14	04.09.2020 13:59	04.09.2020 14:20	04.09.2020 14:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		8320 50.4	716 4.96	2030 24.9	12.1 5.02	8.06 4.97	7.91 4.99
TPH By SW8015 Mod	<i>Extracted:</i>	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 11:00	04.09.2020 16:30	04.09.2020 16:30
	<i>Analyzed:</i>	04.09.2020 19:54	04.09.2020 20:15	04.09.2020 20:37	04.09.2020 20:58	04.09.2020 22:46	04.09.2020 23:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 658342

Tetra Tech- Midland, Midland, TX

Project Name: Riser 7

Project Id:

Date Received in Lab: Wed 04.08.2020 15:35

Contact: Mike Carmona

Report Date: 04.10.2020 16:18

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658342-043	658342-044	658342-045	658342-046	658342-047	658342-048
	<i>Field Id:</i>	AH-13 1'-1.5'	AH-14 0-1'	AH-14 1'-1.5'	AH-15 0-1'	AH-15 1'-1.5'	AH-16 0-1'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B NO_CERT#	<i>Extracted:</i>	04.09.2020 16:42	04.09.2020 16:42	04.09.2020 16:42	04.09.2020 16:42	04.09.2020 16:42	04.09.2020 16:42
	<i>Analyzed:</i>	04.10.2020 01:00	04.10.2020 01:20	04.10.2020 01:41	04.10.2020 02:01	04.10.2020 02:21	04.10.2020 02:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202
Toluene		<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202
Ethylbenzene		<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202
m,p-Xylenes		<0.00404 0.00404	<0.00403 0.00403	<0.00396 0.00396	<0.00404 0.00404	<0.00402 0.00402	<0.00403 0.00403
o-Xylene		<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202
Total Xylenes		<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202
Total BTEX		<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	04.09.2020 11:20	04.09.2020 11:20	04.09.2020 11:20	04.09.2020 11:20	04.09.2020 11:20	04.09.2020 11:20
	<i>Analyzed:</i>	04.09.2020 14:41	04.09.2020 14:46	04.09.2020 14:51	04.09.2020 14:57	04.09.2020 15:02	04.09.2020 15:07
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.04 5.04	<4.98 4.98	<5.03 5.03	<5.05 5.05	<5.04 5.04	<4.98 4.98
TPH By SW8015 Mod	<i>Extracted:</i>	04.09.2020 16:30	04.09.2020 16:30	04.09.2020 16:30	04.09.2020 16:30	04.09.2020 16:30	04.09.2020 16:30
	<i>Analyzed:</i>	04.10.2020 00:12	04.10.2020 00:33	04.10.2020 00:55	04.10.2020 01:16	04.10.2020 01:38	04.10.2020 02:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 658342

Tetra Tech- Midland, Midland, TX

Project Name: Riser 7

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Wed 04.08.2020 15:35

Report Date: 04.10.2020 16:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658342-049	658342-050	658342-051	658342-052		
	<i>Field Id:</i>	AH-16 1'-1.5'	AH-16 2'-2.5'	AH-17 0-1'	AH-17 1'-1.5'		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00		
BTEX by EPA 8021B NO_CERT#	<i>Extracted:</i>	04.09.2020 16:42	04.09.2020 16:42	04.09.2020 16:42	04.09.2020 16:42		
	<i>Analyzed:</i>	04.10.2020 03:02	04.10.2020 03:23	04.10.2020 04:24	04.10.2020 04:44		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
m,p-Xylenes		<0.00404 0.00404	<0.00399 0.00399	<0.00404 0.00404	<0.00402 0.00402		
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201		
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	04.09.2020 12:25	04.09.2020 12:25	04.09.2020 12:25	04.09.2020 12:25		
	<i>Analyzed:</i>	04.09.2020 19:05	04.09.2020 19:21	04.09.2020 19:26	04.09.2020 19:47		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		10.2 5.02	5.81 4.95	<4.98 4.98	<5.00 5.00		
TPH By SW8015 Mod	<i>Extracted:</i>	04.09.2020 16:30	04.09.2020 16:30	04.09.2020 16:30	04.09.2020 16:30		
	<i>Analyzed:</i>	04.10.2020 02:21	04.10.2020 02:43	04.10.2020 03:26	04.10.2020 03:48		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9		
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9		
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9		
Total TPH		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9		

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Jessica Kramer
Project Manager



Flagging Criteria

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

****** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Form 2 - Surrogate Recoveries

Project Name: Riser 7

Work Orders: 658342

Project ID:

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = $100 * A / B$
All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries

Project Name: Riser 7

Work Order #: 658342

Project ID:

Analyst: CHE

Date Prepared: 04.09.2020

Date Analyzed: 04.09.2020

Lab Batch ID: 3122571

Sample: 7700911-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<5.00	250	249	100	250	249	100	0	90-110	20	

Analyst: CHE

Date Prepared: 04.09.2020

Date Analyzed: 04.09.2020

Lab Batch ID: 3122581

Sample: 7700913-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<5.00	250	252	101	250	253	101	0	90-110	20	

Analyst: CHE

Date Prepared: 04.09.2020

Date Analyzed: 04.09.2020

Lab Batch ID: 3122690

Sample: 7700914-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<5.00	250	256	102	250	261	104	2	90-110	20	

Relative Percent Difference RPD = $200 * |(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100 * (C)/[B]$ Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: Riser 7

Work Order #: 658342

Project ID:

Analyst: CHE

Date Prepared: 04.09.2020

Date Analyzed: 04.09.2020

Lab Batch ID: 3122595

Sample: 7700915-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<5.00	250	248	99	250	248	99	0	90-110	20	

Relative Percent Difference RPD = $200 * |(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100 * (C)/[B]$ Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Riser 7

Work Order #: 658342

Lab Batch ID: 3122571

Date Analyzed: 04.09.2020

Reporting Units: mg/kg

Project ID:

QC- Sample ID: 658313-009 S

Date Prepared: 04.09.2020

Batch #: 1 Matrix: Soil

Analyst: CHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	133	248	379	99	248	377	98	1	90-110	20	

Lab Batch ID: 3122571

QC- Sample ID: 658342-027 S

Batch #: 1 Matrix: Soil

Date Analyzed: 04.09.2020

Date Prepared: 04.09.2020

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	91.1	253	350	102	253	350	102	0	90-110	20	

Lab Batch ID: 3122581

QC- Sample ID: 658342-040 S

Batch #: 1 Matrix: Soil

Date Analyzed: 04.09.2020

Date Prepared: 04.09.2020

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	12.1	251	267	102	251	271	103	1	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A) / B$
 Relative Percent Difference $RPD = 200 \times |(C-F) / (C+F)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Riser 7

Work Order #: 658342

Lab Batch ID: 3122581

Date Analyzed: 04.09.2020

Reporting Units: mg/kg

Project ID:

QC- Sample ID: 658400-002 S

Batch #: 1 Matrix: Soil

Date Prepared: 04.09.2020

Analyst: CHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	302	250	529	91	250	534	93	1	90-110	20	

Lab Batch ID: 3122595

QC- Sample ID: 658342-024 S

Batch #: 1 Matrix: Soil

Date Analyzed: 04.09.2020

Date Prepared: 04.09.2020

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	80.9	248	325	98	248	326	99	0	90-110	20	

Lab Batch ID: 3122595

QC- Sample ID: 658342-052 S

Batch #: 1 Matrix: Soil

Date Analyzed: 04.09.2020

Date Prepared: 04.09.2020

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.00	250	255	102	250	253	101	1	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 * (C - A) / B$
 Relative Percent Difference $RPD = 200 * |(C - F) / (C + F)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: Riser 7

Work Order #: 658342

Lab Batch ID: 3122690

Date Analyzed: 04.09.2020

Reporting Units: mg/kg

Project ID:

QC- Sample ID: 658342-001 S

Batch #: 1 Matrix: Soil

Date Prepared: 04.09.2020

Analyst: CHE

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<5.05	253	254	100	253	254	100	0	90-110	20	

Lab Batch ID: 3122690

QC- Sample ID: 658342-007 S

Batch #: 1 Matrix: Soil

Date Analyzed: 04.09.2020

Date Prepared: 04.09.2020

Analyst: CHE

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	272	252	504	92	252	509	94	1	90-110	20	

Matrix Spike Percent Recovery $[D] = 100 * (C - A) / B$
 Relative Percent Difference $RPD = 200 * |(C - F) / (C + F)|$

Matrix Spike Duplicate Percent Recovery $[G] = 100 * (F - A) / E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Analysis Request of Custody Record



Tetra Tech, Inc.

 900 West Wall Street, Ste 100
 Midland, Texas 79701
 Tel (432) 682-4559
 Fax (432) 682-3946

Page 1 of 6

Client Name: EOG		Site Manager: Mike Carmona	
Project Name: Riser 7			
Project Location: Lea County, New Mexico		Project #:	
Invoice to: James Kennedy		Sampler Signature: Devin Dominguez	
Receiving Laboratory: Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None				
										YEAR: 2020			
	AH-1 0-1'	4/7/2020		X				X				1	N
	AH-1 1'-1.5'	4/7/2020		X				X				1	N
	AH-1 2-2.5'	4/7/2020		X				X				1	N
	AH-2 0-1'	4/7/2020		X				X				1	N
	AH-2 1'-1.5'	4/7/2020		X				X				1	N
	AH-2 2-2.5'	4/7/2020		X				X				1	N
	AH-3 0-1'	4/7/2020		X				X				1	N
	AH-3 1'-1.5'	4/7/2020		X				X				1	N
	AH-3 2-2.5'	4/7/2020		X				X				1	N
	AH-3 3-3.5'	4/7/2020		X				X				1	N

Relinquished by:	Date: 4/8	Time: 1535
Relinquished by:	Date: 4/8	Time: 1535
Relinquished by:	Date: 4/8	Time: 1535
Relinquished by:	Date: 4/8	Time: 1535

Received by:	Date: 4/8	Time: 1535
Received by:	Date: 4/8	Time: 1535
Received by:	Date: 4/8	Time: 1535
Received by:	Date: 4/8	Time: 1535

LAB USE ONLY	REMARKS:	☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr <u>72 hr</u> ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report

BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance TPH 8015R Hold
--

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Page 2 of 6

Client Name: EOG		Site Manager: Mike Carmona	
Project Name: Riser 7			
Project Location: Lea County, New Mexico		Project #:	
Invoice to: James Kennedy		Sampler Signature: Devin Dominguez	
Receiving Laboratory: Xenco			
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME		WATER	SOIL	HCL	HNO ₃	ICE			None
	AH-3 4'-4.5'	4/7/2020		X				X			1	N
	AH-4 0-1'	4/7/2020		X				X			1	N
	AH-4 1'-1.5'	4/7/2020		X				X			1	N
	AH-4 2'-2.5'	4/7/2020		X				X			1	N
	AH-5 0-1'	4/7/2020		X				X			1	N
	AH-5 1'-1.5'	4/7/2020		X				X			1	N
	AH-5 2'-2.5'	4/7/2020		X				X			1	N
	AH-5 3'-3.5'	4/7/2020		X				X			1	N
	AH-5 4'-4.5'	4/7/2020		X				X			1	N
	AH-6 0-1'	4/7/2020		X				X			1	N

Relinquished by:	Date: 4/8	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:	STANDARD	
		☒ RUSH: Same Day 24 hr 48 hr 72 hr	☐ Rush Charges Authorized
		☐ Special Report Limits or TRRP Report	

Sample Temperature		141.3
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ANALYSIS REQUEST	
(Circle or Specify Method No.)	
BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
TPH 8015R	
Hold	

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Page 3 of 6

Client Name: EOG		Site Manager: Mike Carmona	
Project Name: Riser 7		Project #:	
Project Location: (county, state) Lea County, New Mexico		Project #:	
Invoice to: James Kennedy		Sampler Signature: Devin Dominguez	
Receiving Laboratory: Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME		WATER	SOIL	HCL	HNO ₃	ICE			None
	AH-6 1'-1.5'	4/7/2020		X			X			1	N	X
	AH-6 2'-2.5'	4/7/2020		X			X			1	N	X
	AH-6 3'-3.5'	4/7/2020		X			X			1	N	X
	AH-7 0'-1'	4/7/2020		X			X			1	N	X
	AH-7 1'-1.5'	4/7/2020		X			X			1	N	X
	AH-7 2'-2.5'	4/7/2020		X			X			1	N	X
	AH-8 0'-1'	4/7/2020		X			X			1	N	X
	AH-8 1'-1.5'	4/7/2020		X			X			1	N	X
	AH-8 2'-2.5'	4/7/2020		X			X			1	N	X
	AH-8 3'-3.5'	4/7/2020		X			X			1	N	X

LAB USE ONLY	REMARKS:
☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report	ANALYSIS REQUEST (Circle or Specify Method No.) BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance TPH 8015R Hold

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 900 West Wall Street, Ste 100
 Midland, Texas 79701
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Page 4 of 6

Client Name: EOG		Site Manager: Mike Carmona	
Project Name: Riser 7		Project #:	
Project Location: Lea County, New Mexico			
Invoice to: James Kennedy		Sampler Signature: Devin Dominguez	
Receiving Laboratory: Xenco			
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)		
		DATE	TIME		WATER	SOIL	HCL	HNO ₃			ICE	None
	AH-9 0-1'	4/7/2020		X			X			1	N	
	AH-9 1'-1.5'	4/7/2020		X			X			1	N	
	AH-9 2-2.5'	4/7/2020		X			X			1	N	
	AH-9 3-3.5'	4/7/2020		X			X			1	N	
	AH-10 0-1'	4/7/2020		X			X			1	N	
	AH-10 1'-1.5'	4/7/2020		X			X			1	N	
	AH-10 2'-2.5'	4/7/2020		X			X			1	N	
	AH-11 0-1'	4/7/2020		X			X			1	N	
	AH-11 1'-1.5'	4/7/2020		X			X			1	N	
	AH-12 0-1'	4/7/2020		X			X			1	N	

LAB USE ONLY		REMARKS:	
Sample Temperature	STANDARD		
1611.3	☒	☐ RUSH: Same Day 24 hr 48 hr 72 hr	
	☐	☐ Rush Charges Authorized	
	☐	☐ Special Report Limits or TRRP Report	

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Analysis Request of Custody Record



Tetra Tech, Inc.

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Midland, Texas 79701
Tel (432) 682-4559
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Page 5 of 6

Client Name: EOG		Site Manager: Mike Carmona	
Project Name: Riser 7		Project #:	
Project Location: Lea County, New Mexico		Project #:	
Invoice to: James Kennedy		Sampler Signature: Devin Dominguez	
Receiving Laboratory: Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME		WATER	SOIL	HCL	HNO ₃	ICE			None
	AH-12 1'-1.5'	4/7/2020		X				X			1	N
	AH-13 0-1'	4/7/2020		X				X			1	N
	AH-13 1'-1.5'	4/7/2020		X				X			1	N
	AH-14 0-1'	4/7/2020		X				X			1	N
	AH-14 1'-1.5'	4/7/2020		X				X			1	N
	AH-15 0-1'	4/7/2020		X				X			1	N
	AH-15 1'-1.5'	4/7/2020		X				X			1	N
	AH-16 0-1'	4/7/2020		X				X			1	N
	AH-16 1'-1.5'	4/7/2020		X				X			1	N
	AH-16 2'-2.5'	4/7/2020		X				X			1	N

Relinquished by:	Date: 4/8	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report	ANALYSIS REQUEST (Circle or Specify Method No.) BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance TPH 8015R Hold

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

900 West Wall Street, Ste 100
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Tel (432) 682-4559
Fax (432) 682-3946

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155042

Page 6 of 6

Inter-Office Shipment

IOS Number : **61841**

Date/Time: 04.08.2020

Created by: Brianna Teel

Please send report to: Jessica Kramer

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: **Carlsbad**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
658342-001	S	AH-1 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-002	S	AH-1 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-003	S	AH-1 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-004	S	AH-2 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-005	S	AH-2 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-006	S	AH-2 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-007	S	AH-3 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-008	S	AH-3 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-009	S	AH-3 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-010	S	AH-3 3'-3.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-011	S	AH-3 4'-4.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-012	S	AH-4 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-013	S	AH-4 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-014	S	AH-4 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-015	S	AH-5 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-016	S	AH-5 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-017	S	AH-5 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-018	S	AH-5 3'-3.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-019	S	AH-5 4'-4.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-020	S	AH-6 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-021	S	AH-6 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-022	S	AH-6 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-023	S	AH-6 3'-3.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-024	S	AH-7 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-025	S	AH-7 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	

Inter-Office Shipment

IOS Number : **61841**

Date/Time: 04.08.2020

Created by: Brianna Teel

Please send report to: Jessica Kramer

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: **Carlsbad**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
658342-026	S	AH-7 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-027	S	AH-8 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-028	S	AH-8 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-029	S	AH-8 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-030	S	AH-8 3'-3.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-031	S	AH-9 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-032	S	AH-9 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-033	S	AH-9 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-034	S	AH-9 3'-3.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-035	S	AH-10 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-036	S	AH-10 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-037	S	AH-10 2-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-038	S	AH-11 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-039	S	AH-11 1-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-040	S	AH-12 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-041	S	AH-12 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-042	S	AH-13 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-043	S	AH-13 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-044	S	AH-14 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-045	S	AH-14 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-046	S	AH-15 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-047	S	AH-15 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-048	S	AH-16 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-049	S	AH-16 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-050	S	AH-16 2'-2.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	

Inter Office Shipment or Sample Comments:

Inter-Office Shipment

IOS Number : **61841**

Date/Time: 04.08.2020

Created by: Brianna Teel

Please send report to: Jessica Kramer

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: **Carlsbad**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
658342-051	S	AH-17 0-1'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	
658342-052	S	AH-17 1'-1.5'	04.07.2020 00:00	SW8021B	BTEX by EPA 8021B	04.10.2020	04.21.2020	JKR	BR4FBZ BZ BZME EBZ	

Inter Office Shipment or Sample Comments:

Relinquished By:



Date Relinquished:

Brianna Teel

04.08.2020

Received By:



Date Received:

Elizabeth McClellan

04.09.2020

Cooler Temperature: 3.0



Inter-Office Shipment

Page 1 of 5

IOS Number **61868**

Date/Time: 04/08/20 17:39

Created by: Jessica Kramer

Please send report to: Jessica Kramer

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: **Houston**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
658342-001	W	AH-1 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-001	W	AH-1 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-002	W	AH-1 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-002	W	AH-1 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-003	W	AH-1 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-003	W	AH-1 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-004	W	AH-2 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-004	W	AH-2 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-005	W	AH-2 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-005	W	AH-2 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-006	W	AH-2 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-006	W	AH-2 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-007	W	AH-3 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-007	W	AH-3 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-008	W	AH-3 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-008	W	AH-3 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-009	W	AH-3 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-009	W	AH-3 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-010	W	AH-3 3'-3.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-010	W	AH-3 3'-3.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-011	W	AH-3 4'-4.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-011	W	AH-3 4'-4.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-012	W	AH-4 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-012	W	AH-4 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-013	W	AH-4 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	

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E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
658342-013	W	AH-4 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-014	W	AH-4 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-014	W	AH-4 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-015	W	AH-5 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-015	W	AH-5 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-016	W	AH-5 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-016	W	AH-5 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-017	W	AH-5 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-017	W	AH-5 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-018	W	AH-5 3'-3.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-018	W	AH-5 3'-3.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-019	W	AH-5 4'-4.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-019	W	AH-5 4'-4.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-020	W	AH-6 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-020	W	AH-6 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-021	W	AH-6 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-021	W	AH-6 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-022	W	AH-6 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-022	W	AH-6 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-023	W	AH-6 3'-3.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-023	W	AH-6 3'-3.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-024	W	AH-7 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-024	W	AH-7 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-025	W	AH-7 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-025	W	AH-7 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	

Inter Office Shipment or Sample Comments:

Advised client on TCLP Metals - Insufficient sample. Client wanted to move forward and have lab try. JK 04/08/20

IOS Number **61868**

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Lab# From: **Midland**

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Address: 1211 W. Florida Ave

Lab# To: **Houston**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
658342-026	W	AH-7 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-026	W	AH-7 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-027	W	AH-8 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-027	W	AH-8 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-028	W	AH-8 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-028	W	AH-8 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-029	W	AH-8 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-029	W	AH-8 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-030	W	AH-8 3'-3.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-030	W	AH-8 3'-3.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-031	W	AH-9 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-031	W	AH-9 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-032	W	AH-9 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-032	W	AH-9 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-033	W	AH-9 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-033	W	AH-9 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-034	W	AH-9 3'-3.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-034	W	AH-9 3'-3.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-035	W	AH-10 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-035	W	AH-10 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-036	W	AH-10 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-036	W	AH-10 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-037	W	AH-10 2-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-037	W	AH-10 2-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-038	W	AH-11 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	

Inter Office Shipment or Sample Comments:

Relinquished By:

Received By:

Released to Imaging: 1/27/2022 2:25:58 PM

IOS Number **61868**

Date/Time: 04/08/20 17:39

Created by: Jessica Kramer

Please send report to: Jessica Kramer

Lab# From: **Midland**

Delivery Priority:

Address: 1211 W. Florida Ave

Lab# To: **Houston**

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
658342-038	W	AH-11 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-039	W	AH-11 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-039	W	AH-11 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-040	W	AH-12 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-040	W	AH-12 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-041	W	AH-12 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-041	W	AH-12 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-042	W	AH-13 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-042	W	AH-13 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-043	W	AH-13 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-043	W	AH-13 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-044	W	AH-14 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-044	W	AH-14 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-045	W	AH-14 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-045	W	AH-14 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-046	W	AH-15 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-046	W	AH-15 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-047	W	AH-15 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-047	W	AH-15 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-048	W	AH-16 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-048	W	AH-16 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-049	W	AH-16 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-049	W	AH-16 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-050	W	AH-16 2'-2.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-050	W	AH-16 2'-2.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	

Inter Office Shipment or Sample Comments:

Date Relinquished:

Date Received:

Released to Imaging: 1/27/2022 2:25:58 PM



Inter-Office Shipment

Page 5 of 5

IOS Number **61868**

Date/Time: 04/08/20 17:39

Created by: Jessica Kramer

Please send report to: Jessica Kramer

Lab# From: **Midland**

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E-Mail: jessica.kramer@xenco.com

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658342-051	W	AH-17 0-1'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-051	W	AH-17 0-1'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	
658342-052	W	AH-17 1'-1.5'	04/07/20 00:00	SW6010C_TCLP	TCLP Metal by SW846 6010C	04/10/20	10/04/20	JKR	AG AS BA CD CR PB SE	
658342-052	W	AH-17 1'-1.5'	04/07/20 00:00	SW7470A_TCLP	TCLP Mercury by SW-846 1311/7470A	04/10/20	05/05/20	JKR	HG	

Inter Office Shipment or Sample Comments:

Jessica Kramer

04/08/2020

Cooler Temperature:



XENCO Laboratories



Inter Office Report- Sample Receipt Checklist

Sent To: Carlsbad

IOS #: 61841

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sent By: Brianna Teel

Date Sent: 04.08.2020 04.07 PM

Received By: Elizabeth McClellan

Date Received: 04.09.2020 11.00 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	Yes
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Elizabeth McClellan

Date: 04.09.2020

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 04.08.2020 03.35.00 PM

Work Order #: 658342

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.3
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	No
#8 Any missing/extra samples?	Yes
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes Xenco Carlsbad-BTEX
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 04.08.2020

Checklist reviewed by:



Jessica Kramer

Date: 04.09.2020

Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-001	669624-002	669624-003	669624-004	669624-005	669624-006
	<i>Field Id:</i>	Bottomhole-1 (4')	Bottomhole-2 (4')	Bottomhole-3 (4')	Bottomhole-4 (4.5')	Bottomhole-5 (4.5')	Bottomhole-6 (4.5')
	<i>Depth:</i>	4- ft	4- ft	4- ft	4.5- ft	4.5- ft	4.5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50
	<i>Analyzed:</i>	08.10.2020 17:59	08.10.2020 18:19	08.10.2020 18:39	08.10.2020 19:00	08.10.2020 19:20	08.10.2020 19:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401	<0.00399 0.00399	<0.00402 0.00402	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07
	<i>Analyzed:</i>	08.10.2020 16:29	08.10.2020 16:46	08.10.2020 16:51	08.10.2020 16:57	08.10.2020 17:02	08.10.2020 17:19
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		16.7 9.94	31.4 9.98	24.5 9.94	20.6 10.0	43.0 10.1	7200 49.7
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15
	<i>Analyzed:</i>	08.10.2020 15:29	08.10.2020 16:29	08.10.2020 16:49	08.10.2020 17:09	08.10.2020 17:30	08.10.2020 17:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.1 50.1	<49.9 49.9
Diesel Range Organics (DRO)		<50.2 50.2	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.1 50.1	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.1 50.1	<49.9 49.9
Total TPH		<50.2 50.2	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.1 50.1	<49.9 49.9

BRL - Below Reporting Limit

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Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-007	669624-008	669624-009	669624-010	669624-011	669624-012
	<i>Field Id:</i>	Bottomhole-7 (4.5')	Bottomhole-8 (4.5')	Bottomhole-9 (4.5')	Bottomhole-10 (4.5')	Bottomhole-11 (4.5')	Bottomhole-12 (5')
	<i>Depth:</i>	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft	5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50
	<i>Analyzed:</i>	08.10.2020 20:01	08.10.2020 20:21	08.10.2020 20:42	08.10.2020 21:02	08.10.2020 22:18	08.10.2020 22:38
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Toluene		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Ethylbenzene		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
m,p-Xylenes		<0.00402 0.00402	<0.00402 0.00402	<0.00402 0.00402	<0.00398 0.00398	<0.00403 0.00403	<0.00398 0.00398
o-Xylene		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Total Xylenes		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Total BTEX		<0.00201 0.00201	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07
	<i>Analyzed:</i>	08.10.2020 17:25	08.10.2020 17:30	08.10.2020 17:36	08.10.2020 17:41	08.10.2020 17:47	08.10.2020 18:04
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		6130 49.6	7210 49.5	6550 49.8	6910 49.9	7450 49.8	1200 9.98
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15
	<i>Analyzed:</i>	08.10.2020 18:10	08.10.2020 18:31	08.10.2020 18:51	08.10.2020 19:12	08.10.2020 19:52	08.10.2020 20:12
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.2 50.2	<49.8 49.8	<50.0 50.0	<49.8 49.8	<50.1 50.1
Diesel Range Organics (DRO)		<49.8 49.8	<50.2 50.2	<49.8 49.8	<50.0 50.0	<49.8 49.8	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.2 50.2	<49.8 49.8	<50.0 50.0	<49.8 49.8	<50.1 50.1
Total TPH		<49.8 49.8	<50.2 50.2	<49.8 49.8	<50.0 50.0	<49.8 49.8	<50.1 50.1

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Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15
Report Date: 08.13.2020 11:00
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-013	669624-014	669624-015	669624-016	669624-017	669624-018
	<i>Field Id:</i>	Bottomhole-13 (5')	Bottomhole-14 (5')	Bottomhole-15 (5')	Bottomhole-16 (5')	Bottomhole-17 (6')	Bottomhole-18 (6')
	<i>Depth:</i>	5- ft	5- ft	5- ft	5- ft	6- ft	6- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 14:50
	<i>Analyzed:</i>	08.10.2020 22:59	08.10.2020 23:19	08.10.2020 23:39	08.11.2020 00:00	08.11.2020 00:20	08.11.2020 00:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00404 0.00404	<0.00402 0.00402	<0.00404 0.00404	<0.00402 0.00402
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Total BTEX		<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00201 0.00201
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 16:07
	<i>Analyzed:</i>	08.10.2020 18:09	08.10.2020 18:26	08.10.2020 18:32	08.10.2020 18:37	08.10.2020 18:43	08.10.2020 18:49
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1010 9.98	1250 50.2	782 10.1	967 10.1	1100 10.1	1460 50.4
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15
	<i>Analyzed:</i>	08.10.2020 20:32	08.10.2020 20:52	08.10.2020 21:12	08.10.2020 21:33	08.10.2020 21:53	08.10.2020 22:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.3 50.3	<50.2 50.2	<50.1 50.1	<49.9 49.9	<50.3 50.3
Diesel Range Organics (DRO)		<49.8 49.8	<50.3 50.3	<50.2 50.2	<50.1 50.1	<49.9 49.9	<50.3 50.3
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.3 50.3	<50.2 50.2	<50.1 50.1	<49.9 49.9	<50.3 50.3
Total TPH		<49.8 49.8	<50.3 50.3	<50.2 50.2	<50.1 50.1	<49.9 49.9	<50.3 50.3

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Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-019	669624-020	669624-021	669624-022	669624-023	669624-024
	<i>Field Id:</i>	Bottomhole-19 (6')	Bottomhole-20 (6')	Bottomhole-21 (6')	Bottomhole-22 (6')	Bottomhole-23 (4.5')	Bottomhole-24 (4.5')
	<i>Depth:</i>	6- ft	6- ft	6- ft	6- ft	4.5- ft	4.5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 14:50	08.10.2020 14:50	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33
	<i>Analyzed:</i>	08.11.2020 01:01	08.11.2020 01:21	08.10.2020 18:11	08.10.2020 20:14	08.10.2020 20:37	08.10.2020 20:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00402 0.00402	<0.00401 0.00401	<0.00397 0.00397	<0.00401 0.00401	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.10.2020 16:07	08.10.2020 16:07	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15
	<i>Analyzed:</i>	08.10.2020 18:54	08.10.2020 19:00	08.10.2020 19:33	08.10.2020 19:50	08.10.2020 19:55	08.10.2020 20:01
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1630 49.9	1800 50.1	1560 49.6	1820 49.9	1680 50.1	6510 50.2
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15
	<i>Analyzed:</i>	08.10.2020 22:34	08.10.2020 22:54	08.10.2020 18:31	08.10.2020 18:51	08.10.2020 19:12	08.10.2020 19:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.1 50.1
Diesel Range Organics (DRO)		<50.0 50.0	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.1 50.1
Total TPH		<50.0 50.0	<50.2 50.2	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.1 50.1

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Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-025	669624-026	669624-027	669624-028	669624-029	669624-030
	<i>Field Id:</i>	Bottomhole-25 (4.5')	Bottomhole-26 (4.5')	Bottomhole-27 (4.5')	Bottomhole-28 (4.5')	Bottomhole-29 (4.5')	Bottomhole-30 (4.5')
	<i>Depth:</i>	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33
	<i>Analyzed:</i>	08.10.2020 21:22	08.10.2020 21:44	08.10.2020 22:07	08.10.2020 23:25	08.10.2020 23:47	08.11.2020 00:10
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
m,p-Xylenes		<0.00402 0.00402	<0.00399 0.00399	<0.00399 0.00399	<0.00398 0.00398	<0.00402 0.00402	<0.00404 0.00404
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00202 0.00202
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15
	<i>Analyzed:</i>	08.10.2020 20:07	08.10.2020 20:23	08.10.2020 20:29	08.10.2020 20:35	08.10.2020 20:40	08.10.2020 20:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		5860 49.9	5300 49.6	6190 49.7	1920 49.8	1410 49.9	1920 49.7
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15	08.10.2020 15:15
	<i>Analyzed:</i>	08.10.2020 20:12	08.10.2020 20:32	08.10.2020 20:52	08.10.2020 21:12	08.10.2020 21:33	08.10.2020 21:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.2 50.2	<50.1 50.1	<50.3 50.3	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.2 50.2	<50.2 50.2	<50.1 50.1	<50.3 50.3	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.2 50.2	<50.1 50.1	<50.3 50.3	<50.0 50.0	<49.9 49.9
Total TPH		<50.2 50.2	<50.2 50.2	<50.1 50.1	<50.3 50.3	<50.0 50.0	<49.9 49.9

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Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-031	669624-032	669624-033	669624-034	669624-035	669624-036
	<i>Field Id:</i>	Bottomhole-31 (4.5')	Bottomhole-32 (4.5')	Bottomhole-33 (4.5')	Bottomhole-34 (4.5')	Bottomhole-35 (4.5')	Bottomhole-36 (4.5')
	<i>Depth:</i>	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33	08.10.2020 15:33
	<i>Analyzed:</i>	08.11.2020 00:32	08.11.2020 00:55	08.11.2020 01:17	08.11.2020 01:40	08.11.2020 02:02	08.11.2020 02:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00402 0.00402	<0.00401 0.00401	<0.00404 0.00404	<0.00399 0.00399	<0.00401 0.00401
o-Xylene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15
	<i>Analyzed:</i>	08.10.2020 20:51	08.10.2020 21:08	08.10.2020 21:14	08.10.2020 21:30	08.10.2020 21:36	08.10.2020 21:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1860 50.0	5840 49.8	4700 50.1	5570 50.3	6490 50.5	5690 50.0
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30
	<i>Analyzed:</i>	08.11.2020 12:27	08.11.2020 13:29	08.11.2020 13:49	08.11.2020 14:09	08.11.2020 14:30	08.11.2020 14:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<49.8 49.8	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.1 50.1	<49.8 49.8	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<49.8 49.8	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.0 50.0
Total TPH		<50.1 50.1	<49.8 49.8	<49.8 49.8	<50.1 50.1	<50.0 50.0	<50.0 50.0

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Certificate of Analysis Summary 669624

Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
 Contact: Conner Moehring
 Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15

Report Date: 08.13.2020 11:00

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	669624-037	669624-038	669624-039	669624-040	669624-041	669624-042
	Field Id:	Bottomhole-37 (4.5')	Bottomhole-38 (4.5')	Bottomhole-39 (4.5')	Bottomhole-40 (4.5')	Bottomhole-41 (4.5')	Bottomhole-42 (4.5')
	Depth:	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	Extracted:	08.10.2020 15:33	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57
	Analyzed:	08.11.2020 02:47	08.11.2020 04:54	08.11.2020 05:15	08.11.2020 05:35	08.11.2020 05:55	08.11.2020 06:16
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00401 0.00401	<0.00397 0.00397	<0.00399 0.00399	<0.00403 0.00403	<0.00401 0.00401
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	Extracted:	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 17:15	08.10.2020 15:41	08.10.2020 15:41
	Analyzed:	08.10.2020 21:47	08.10.2020 21:53	08.10.2020 21:58	08.10.2020 22:04	08.10.2020 22:37	08.10.2020 23:11
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		6290 49.9	3080 49.8	3300 49.9	2960 50.0	4450 50.0	4040 50.4
TPH By SW8015 Mod	Extracted:	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30
	Analyzed:	08.11.2020 15:11	08.11.2020 15:31	08.11.2020 15:51	08.11.2020 16:11	08.11.2020 16:52	08.11.2020 17:12
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.3 50.3	<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.3 50.3	<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.3 50.3	<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.0 50.0
Total TPH		<49.9 49.9	<50.3 50.3	<50.1 50.1	<49.8 49.8	<50.2 50.2	<50.0 50.0

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Certificate of Analysis Summary 669624

Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
 Contact: Conner Moehring
 Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15

Report Date: 08.13.2020 11:00

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	669624-043	669624-044	669624-045	669624-046	669624-047	669624-048
	Field Id:	Bottomhole-43 (4.5')	Bottomhole-44 (4.5')	Bottomhole-45 (4.5')	Bottomhole-46 (4.5')	Bottomhole-47 (4.5')	Bottomhole-48 (4.5')
	Depth:	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	Extracted:	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57
	Analyzed:	08.11.2020 06:36	08.11.2020 06:57	08.11.2020 07:17	08.11.2020 07:37	08.11.2020 07:58	08.11.2020 09:14
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00401 0.00401	<0.00403 0.00403	<0.00403 0.00403	<0.00397 0.00397	<0.00399 0.00399
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00198 0.00198	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	Extracted:	08.10.2020 15:41	08.10.2020 15:41	08.10.2020 15:41	08.10.2020 15:41	08.10.2020 15:41	08.10.2020 15:41
	Analyzed:	08.10.2020 23:16	08.10.2020 23:33	08.10.2020 23:39	08.10.2020 23:44	08.10.2020 23:50	08.10.2020 23:55
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3900 50.1	6520 50.1	6400 49.6	6610 49.9	6780 49.6	5750 49.6
TPH By SW8015 Mod	Extracted:	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30
	Analyzed:	08.11.2020 17:32	08.11.2020 17:52	08.11.2020 18:12	08.11.2020 18:33	08.11.2020 18:53	08.11.2020 19:14
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.1 50.1	<49.9 49.9	<49.9 49.9	<50.2 50.2	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<50.1 50.1	<49.9 49.9	<49.9 49.9	<50.2 50.2	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.1 50.1	<49.9 49.9	<49.9 49.9	<50.2 50.2	<49.9 49.9
Total TPH		<49.9 49.9	<50.1 50.1	<49.9 49.9	<49.9 49.9	<50.2 50.2	<49.9 49.9

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Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-049	669624-050	669624-051	669624-052	669624-053	669624-054
	<i>Field Id:</i>	Bottomhole-49 (4.5')	Bottomhole-50 (4.5')	Bottomhole-51 (4.5')	Bottomhole-52 (4.5')	Bottomhole-53 (4.5')	Bottomhole-54 (4.5')
	<i>Depth:</i>	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57
	<i>Analyzed:</i>	08.11.2020 09:34	08.11.2020 09:54	08.11.2020 10:15	08.11.2020 10:35	08.11.2020 10:56	08.11.2020 11:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00403 0.00403	<0.00401 0.00401	<0.00399 0.00399	<0.00397 0.00397	<0.00395 0.00395
o-Xylene		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.10.2020 15:41	08.10.2020 15:41	08.10.2020 15:41	08.10.2020 15:41	08.10.2020 15:41	08.10.2020 15:41
	<i>Analyzed:</i>	08.11.2020 00:12	08.11.2020 00:18	08.11.2020 00:34	08.11.2020 00:40	08.11.2020 00:45	08.11.2020 00:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		6130 49.4	5420 49.9	1610 49.8	2380 49.9	1800 50.1	23.5 10.1
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30
	<i>Analyzed:</i>	08.11.2020 19:34	08.11.2020 19:54	08.11.2020 12:27	08.11.2020 13:29	08.11.2020 13:49	08.11.2020 14:09
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.8 49.8
Diesel Range Organics (DRO)		<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.8 49.8
Total TPH		<50.3 50.3	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.8 49.8

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Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-055	669624-056	669624-057	669624-058	669624-059	669624-060
	<i>Field Id:</i>	Bottomhole-55 (4.5')	Bottomhole-56 (4.5')	Bottomhole-57 (4.5')	Bottomhole-58 (4.5')	Bottomhole-59 (4.5')	Bottomhole-60 (1')
	<i>Depth:</i>	4.5- ft	4.5- ft	4.5- ft	4.5- ft	4.5- ft	1- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:57	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03
	<i>Analyzed:</i>	08.11.2020 11:36	08.11.2020 11:57	08.11.2020 12:17	08.11.2020 06:52	08.11.2020 07:15	08.11.2020 07:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00397 0.00397	<0.00401 0.00401	<0.00402 0.00402	<0.00403 0.00403	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.10.2020 15:41	08.10.2020 15:41	08.10.2020 15:41	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03
	<i>Analyzed:</i>	08.11.2020 00:57	08.11.2020 01:02	08.11.2020 01:08	** ** *	08.11.2020 15:07	08.11.2020 15:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		13.9 10.0	14.6 10.0	14.8 9.98	10.8 9.90	<9.92 9.92	11.0 9.98
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30
	<i>Analyzed:</i>	08.11.2020 14:30	08.11.2020 14:50	08.11.2020 15:11	08.11.2020 15:31	08.11.2020 15:51	08.11.2020 16:11
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.0 50.0
Total TPH		<50.2 50.2	<49.8 49.8	<50.1 50.1	<50.2 50.2	<49.9 49.9	<50.0 50.0

BRL - Below Reporting Limit

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Certificate of Analysis Summary 669624

Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
 Contact: Conner Moehring
 Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15

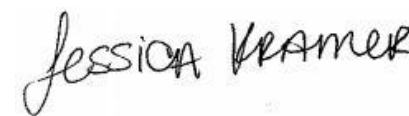
Report Date: 08.13.2020 11:00

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-061	669624-062	669624-063	669624-064	669624-065	669624-066
	<i>Field Id:</i>	Bottomhole-61 (1')	Bottomhole-62 (1')	Bottomhole-63 (1')	Bottomhole-64 (1')	Bottomhole-65 (1')	Bottomhole-66 (1')
	<i>Depth:</i>	1- ft	1- ft	1- ft	1- ft	1- ft	1- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03
	<i>Analyzed:</i>	08.11.2020 08:00	08.11.2020 08:32	08.11.2020 08:45	08.11.2020 09:07	08.11.2020 09:30	08.11.2020 09:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398	<0.00395 0.00395	<0.00399 0.00399	<0.00397 0.00397
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03
	<i>Analyzed:</i>	08.11.2020 15:19	08.11.2020 15:24	08.11.2020 15:41	08.11.2020 15:46	08.11.2020 15:52	08.11.2020 15:58
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<10.0 10.0	<10.0 10.0	<9.98 9.98	<9.92 9.92	<9.98 9.98	12.7 9.88
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30
	<i>Analyzed:</i>	08.11.2020 16:52	08.11.2020 17:12	08.11.2020 17:32	08.11.2020 17:52	08.11.2020 18:12	08.11.2020 18:33
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.2 50.2
Diesel Range Organics (DRO)		<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.2 50.2
Total TPH		<50.0 50.0	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.2 50.2

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Certificate of Analysis Summary 669624

Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
 Contact: Conner Moehring
 Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15

Report Date: 08.13.2020 11:00

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	669624-067	669624-068	669624-069	669624-070	669624-071	669624-072
	Field Id:	Bottomhole-67 (1')	Bottomhole-68 (1')	Bottomhole-69 (1')	Sidewall-1	Sidewall-2	Sidewall-3
	Depth:	1- ft	1- ft	1- ft			
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	Extracted:	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03
	Analyzed:	08.11.2020 10:14	08.11.2020 11:33	08.11.2020 11:55	08.11.2020 12:18	08.11.2020 12:40	08.11.2020 13:03
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00395 0.00395	<0.00399 0.00399	<0.00398 0.00398	<0.00395 0.00395
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Inorganic Anions by EPA 300/300.1	Extracted:	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03
	Analyzed:	08.11.2020 16:03	08.11.2020 16:09	08.11.2020 16:25	08.11.2020 16:31	08.11.2020 16:48	08.11.2020 16:53
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		10.3 9.98	<9.92 9.92	16.0 9.98	16.7 10.0	42.6 9.88	26.1 9.98
TPH By SW8015 Mod	Extracted:	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.10.2020 17:30	08.11.2020 17:00	08.11.2020 17:00
	Analyzed:	08.11.2020 18:53	08.11.2020 19:14	08.11.2020 19:34	08.11.2020 19:54	08.11.2020 22:15	08.11.2020 23:16
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.1 50.1
Diesel Range Organics (DRO)		<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.1 50.1
Total TPH		<49.9 49.9	<50.1 50.1	<50.2 50.2	<50.2 50.2	<50.0 50.0	<50.1 50.1

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Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-073	669624-074	669624-075	669624-076	669624-077	669624-078
	<i>Field Id:</i>	Sidewall-4	Sidewall-5	Sidewall-6	Sidewall-7	Sidewall-8	Sidewall-9
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03	08.10.2020 16:03	08.11.2020 16:56
	<i>Analyzed:</i>	08.11.2020 13:25	08.11.2020 13:48	08.11.2020 14:10	08.11.2020 14:33	08.11.2020 14:55	08.11.2020 18:39
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00401 0.00401	<0.00402 0.00402	<0.00401 0.00401	<0.00403 0.00403	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 15:03	08.11.2020 10:10
	<i>Analyzed:</i>	08.11.2020 16:59	08.11.2020 17:04	08.11.2020 17:10	08.11.2020 17:16	08.11.2020 17:21	08.11.2020 17:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		47.2 9.96	32.9 9.98	<9.92 9.92	<9.98 9.98	124 9.92	176 9.94
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00
	<i>Analyzed:</i>	08.11.2020 23:36	08.11.2020 23:56	08.12.2020 00:17	08.12.2020 00:37	08.12.2020 00:57	08.12.2020 01:17
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.0 50.0	<50.2 50.2	<50.2 50.2	<49.8 49.8	<50.2 50.2
Diesel Range Organics (DRO)		<50.3 50.3	<50.0 50.0	<50.2 50.2	<50.2 50.2	<49.8 49.8	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.0 50.0	<50.2 50.2	<50.2 50.2	<49.8 49.8	<50.2 50.2
Total TPH		<50.3 50.3	<50.0 50.0	<50.2 50.2	<50.2 50.2	<49.8 49.8	<50.2 50.2

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Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-079	669624-080	669624-081	669624-082	669624-083	669624-084
	<i>Field Id:</i>	Sidewall-10	Sidewall-11	Sidewall-12	Sidewall-13	Sidewall-14	Sidewall-15
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56
	<i>Analyzed:</i>	08.11.2020 19:02	08.11.2020 19:24	08.11.2020 19:47	08.11.2020 20:09	08.11.2020 20:32	08.11.2020 20:54
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00401 0.00401	<0.00403 0.00403	<0.00402 0.00402	<0.00403 0.00403	<0.00401 0.00401	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10
	<i>Analyzed:</i>	08.11.2020 18:12	08.11.2020 18:17	08.11.2020 18:23	08.11.2020 18:29	08.11.2020 18:45	08.11.2020 18:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		201 9.98	<9.88 9.88	12.4 9.92	12.1 9.96	11.2 9.98	<9.98 9.98
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00
	<i>Analyzed:</i>	08.12.2020 01:37	08.12.2020 01:58	08.12.2020 02:38	08.12.2020 02:59	08.12.2020 03:19	08.12.2020 03:39
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.1 50.1	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.1 50.1	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.1 50.1	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<49.9 49.9	<50.1 50.1	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0

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Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-085	669624-086	669624-087	669624-088	669624-089	669624-090
	<i>Field Id:</i>	Sidewall-16	Sidewall-17	Sidewall-18	Sidewall-19	Sidewall-20	Sidewall-21
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56
	<i>Analyzed:</i>	08.11.2020 21:17	08.11.2020 21:39	08.11.2020 22:02	08.11.2020 23:20	08.11.2020 23:42	08.12.2020 00:05
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
Toluene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
Ethylbenzene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
m,p-Xylenes		<0.00399 0.00399	<0.00397 0.00397	<0.00399 0.00399	<0.00395 0.00395	<0.00398 0.00398	<0.00403 0.00403
o-Xylene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
Total Xylenes		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
Total BTEX		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10
	<i>Analyzed:</i>	08.11.2020 18:56	08.11.2020 19:02	08.11.2020 19:08	08.11.2020 19:13	08.11.2020 19:30	08.11.2020 19:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<9.90 9.90	<9.94 9.94	44.2 9.96	29.1 9.90	28.7 9.98	41.4 9.98
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00
	<i>Analyzed:</i>	08.12.2020 03:59	08.12.2020 04:20	08.12.2020 04:40	08.12.2020 05:00	08.12.2020 05:20	08.12.2020 05:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<49.8 49.8	<50.0 50.0	<50.1 50.1	<50.0 50.0	<50.2 50.2
Diesel Range Organics (DRO)		<50.3 50.3	<49.8 49.8	<50.0 50.0	<50.1 50.1	<50.0 50.0	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<49.8 49.8	<50.0 50.0	<50.1 50.1	<50.0 50.0	<50.2 50.2
Total TPH		<50.3 50.3	<49.8 49.8	<50.0 50.0	<50.1 50.1	<50.0 50.0	<50.2 50.2

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Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-091	669624-092	669624-093	669624-094	669624-095	669624-096
	<i>Field Id:</i>	Sidewall-22	Sidewall-23	Sidewall-24	Sidewall-25	Sidewall-26	Sidewall-27
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56	08.11.2020 16:56
	<i>Analyzed:</i>	08.12.2020 00:27	08.12.2020 00:49	08.12.2020 01:12	08.12.2020 01:34	08.12.2020 01:57	08.12.2020 02:19
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00403 0.00403	<0.00402 0.00402	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10	08.11.2020 10:10
	<i>Analyzed:</i>	08.11.2020 19:52	08.11.2020 19:58	08.11.2020 20:03	08.11.2020 20:09	08.11.2020 20:14	08.11.2020 20:20
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		46.2 9.96	263 10.0	354 10.0	339 10.0	1400 50.1	1090 49.7
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00
	<i>Analyzed:</i>	08.12.2020 08:02	08.12.2020 09:03	08.12.2020 09:24	08.12.2020 09:44	08.12.2020 10:04	08.12.2020 10:25
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0
Total TPH		<50.1 50.1	<50.0 50.0	<50.1 50.1	<50.0 50.0	<50.0 50.0	<50.0 50.0

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Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15
Report Date: 08.13.2020 11:00
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-097	669624-098	669624-099	669624-100	669624-101	669624-102
	<i>Field Id:</i>	Sidewall-28	Sidewall-29	Sidewall-30	Sidewall-31	Sidewall-32	Sidewall-33
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.11.2020 16:56	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47
	<i>Analyzed:</i>	08.12.2020 02:42	08.11.2020 15:58	08.11.2020 16:19	08.11.2020 16:39	08.11.2020 16:59	08.11.2020 17:20
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
m,p-Xylenes		<0.00399 0.00399	<0.00401 0.00401	<0.00399 0.00399	<0.00400 0.00400	<0.00398 0.00398	<0.00403 0.00403
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.11.2020 10:10	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15
	<i>Analyzed:</i>	08.11.2020 20:26	08.12.2020 04:53	08.12.2020 05:10	08.12.2020 05:15	08.12.2020 05:21	08.12.2020 05:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		994 49.9	765 9.92	873 10.0	1150 50.0	1050 9.98	2260 49.4
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00
	<i>Analyzed:</i>	08.12.2020 10:45	08.12.2020 11:05	08.12.2020 11:26	08.12.2020 11:46	08.12.2020 12:26	08.12.2020 12:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.8 49.8
Total TPH		<50.2 50.2	<50.2 50.2	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.8 49.8

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Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-103	669624-104	669624-105	669624-106	669624-107	669624-108
	<i>Field Id:</i>	Sidewall-34	Sidewall-35	Sidewall-36	Sidewall-37	Sidewall-38	Sidewall-39
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47
	<i>Analyzed:</i>	08.11.2020 17:40	08.11.2020 18:01	08.11.2020 18:21	08.11.2020 18:42	08.11.2020 19:02	08.11.2020 20:18
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00402 0.00402	<0.00402 0.00402	<0.00403 0.00403	<0.00404 0.00404	<0.00399 0.00399	<0.00397 0.00397
o-Xylene		<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00201 0.00201	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15
	<i>Analyzed:</i>	08.12.2020 05:43	08.12.2020 05:49	08.12.2020 05:54	08.12.2020 06:00	08.12.2020 06:06	08.12.2020 06:11
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1780 49.7	1210 9.96	1190 50.5	1230 10.1	1100 10.0	976 9.92
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:00
	<i>Analyzed:</i>	08.12.2020 13:07	08.12.2020 13:27	08.12.2020 13:47	08.12.2020 14:08	08.12.2020 14:28	08.12.2020 14:48
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		<49.8 49.8	<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9
Total TPH		<49.8 49.8	<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9

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Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-109	669624-110	669624-111	669624-112	669624-113	669624-114
	<i>Field Id:</i>	Sidewall-40	Sidewall-41	Sidewall-42	Sidewall-43	Sidewall-44	Sidewall-45
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 13:47	08.11.2020 16:09
	<i>Analyzed:</i>	08.11.2020 20:38	08.11.2020 20:59	08.11.2020 21:19	08.11.2020 21:40	08.11.2020 22:00	08.12.2020 08:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00192 0.00192	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00192 0.00192	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00192 0.00192	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00385 0.00385	<0.00398 0.00398	<0.00401 0.00401	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00192 0.00192	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00192 0.00192	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00192 0.00192	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15
	<i>Analyzed:</i>	08.12.2020 06:28	08.12.2020 06:34	08.12.2020 06:50	08.12.2020 06:56	08.12.2020 07:02	08.12.2020 07:07
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1150 49.9	74.9 9.98	52.4 10.0	48.9 10.1	32.5 10.1	<9.94 9.94
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:00	08.11.2020 17:00	08.11.2020 17:20	08.11.2020 17:20	08.11.2020 17:20	08.11.2020 17:20
	<i>Analyzed:</i>	08.12.2020 15:08	08.12.2020 15:28	08.11.2020 22:15	08.11.2020 23:36	08.11.2020 23:56	08.12.2020 00:17
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.3 50.3	<50.0 50.0	<50.1 50.1
Diesel Range Organics (DRO)		<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.3 50.3	<50.0 50.0	<50.1 50.1
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.3 50.3	<50.0 50.0	<50.1 50.1
Total TPH		<50.1 50.1	<50.1 50.1	<50.3 50.3	<50.3 50.3	<50.0 50.0	<50.1 50.1

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Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-115	669624-116	669624-117	669624-118	669624-119	669624-120
	<i>Field Id:</i>	Sidewall-46	Sidewall-47	Sidewall-48	Sidewall-49	Sidewall-50	Sidewall-51
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09
	<i>Analyzed:</i>	08.12.2020 08:35	08.12.2020 08:55	08.12.2020 09:16	08.12.2020 02:54	08.12.2020 03:15	08.12.2020 03:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00401 0.00401	<0.00397 0.00397	<0.00401 0.00401	<0.00401 0.00401	<0.00399 0.00399	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.11.2020 17:15	08.11.2020 17:15	08.11.2020 17:15	08.12.2020 08:00	08.12.2020 08:00	08.12.2020 08:00
	<i>Analyzed:</i>	08.12.2020 07:13	08.12.2020 07:18	08.12.2020 07:24	08.12.2020 09:10	08.12.2020 09:27	08.12.2020 09:32
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<9.98 9.98	<9.88 9.88	<9.98 9.98	<10.0 10.0	11.1 9.96	10.8 9.98
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:20	08.11.2020 17:20	08.11.2020 17:20	08.11.2020 17:20	08.11.2020 17:20	08.11.2020 17:20
	<i>Analyzed:</i>	08.12.2020 00:37	08.12.2020 00:57	08.12.2020 01:17	08.12.2020 01:37	08.12.2020 01:58	08.12.2020 02:38
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2	<50.0 50.0	<49.9 49.9	<50.1 50.1	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.2 50.2	<50.0 50.0	<49.9 49.9	<50.1 50.1	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2	<50.0 50.0	<49.9 49.9	<50.1 50.1	<50.0 50.0	<49.9 49.9
Total TPH		<50.2 50.2	<50.0 50.0	<49.9 49.9	<50.1 50.1	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 669624



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15**Report Date:** 08.13.2020 11:00**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-121	669624-122	669624-123	669624-124	669624-125	669624-126
	<i>Field Id:</i>	Sidewall-52	Sidewall-53	Sidewall-54	Sidewall-55	Sidewall-56	Internal Sidewall-1
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09
	<i>Analyzed:</i>	08.12.2020 03:56	08.12.2020 04:16	08.12.2020 04:36	08.12.2020 04:57	08.12.2020 05:17	08.12.2020 05:38
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00399 0.00399	<0.00397 0.00397	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.12.2020 08:00	08.12.2020 08:00	08.12.2020 08:00	08.12.2020 08:00	08.12.2020 08:00	08.12.2020 08:00
	<i>Analyzed:</i>	08.12.2020 09:38	08.12.2020 09:44	08.12.2020 10:00	08.12.2020 10:06	08.12.2020 10:11	08.12.2020 10:17
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		10.2 9.92	18.4 9.98	13.9 9.88	16.8 10.0	18.4 9.92	523 10.0
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:20	08.11.2020 17:20	08.11.2020 17:20	08.11.2020 17:30	08.11.2020 17:30	08.11.2020 17:30
	<i>Analyzed:</i>	08.12.2020 02:59	08.12.2020 03:19	08.12.2020 03:39	08.12.2020 08:02	08.12.2020 09:03	08.12.2020 09:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<49.8 49.8	<50.2 50.2
Diesel Range Organics (DRO)		<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<49.8 49.8	<50.2 50.2
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<49.8 49.8	<50.2 50.2
Total TPH		<50.1 50.1	<50.1 50.1	<50.1 50.1	<50.1 50.1	<49.8 49.8	<50.2 50.2

BRL - Below Reporting Limit

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



Tetra Tech- Midland, Midland, TX

Project Name: Heartthrob Riser #7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea County, New Mexico

Date Received in Lab: Mon 08.10.2020 12:15
Report Date: 08.13.2020 11:00
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669624-127	669624-128	669624-129	669624-130		
	<i>Field Id:</i>	Internal Sidewall-2	Internal Sidewall-3	Internal Sidewall-4	Internal Sidewall-5		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.06.2020 00:00		
BTEX by EPA 8021B	<i>Extracted:</i>	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09	08.11.2020 16:09		
	<i>Analyzed:</i>	08.12.2020 05:58	08.12.2020 07:13	08.12.2020 07:34	08.12.2020 07:54		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199		
Toluene		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199		
Ethylbenzene		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199		
m,p-Xylenes		<0.00402 0.00402	<0.00397 0.00397	<0.00399 0.00399	<0.00398 0.00398		
o-Xylene		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199		
Total Xylenes		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199		
Total BTEX		<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199		
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.12.2020 08:00	08.12.2020 08:00	08.12.2020 08:00	08.12.2020 08:00		
	<i>Analyzed:</i>	08.12.2020 10:23	08.12.2020 12:03	08.12.2020 12:20	08.12.2020 10:51		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		610 10.0	2660 49.8	1850 49.9	11.3 9.96		
TPH By SW8015 Mod	<i>Extracted:</i>	08.11.2020 17:30	08.11.2020 17:30	08.11.2020 17:30	08.11.2020 17:30		
	<i>Analyzed:</i>	08.12.2020 09:44	08.12.2020 10:04	08.12.2020 10:25	08.12.2020 10:45		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2		
Diesel Range Organics (DRO)		<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2		
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2		
Total TPH		<49.8 49.8	<50.2 50.2	<50.0 50.0	<50.2 50.2		

BRL - Below Reporting Limit

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



Analytical Report 669624

for

Tetra Tech- Midland

Project Manager: Conner Moehring

Heartthrob Riser #7

212C-MD-02149

08.13.2020

Collected By: Client

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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.13.2020

Project Manager: **Conner Moehring**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **669624**

Heartthrob Riser #7

Project Address: Lea County, New Mexico

Conner Moehring:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 669624. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 669624 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottomhole-1 (4')	S	08.06.2020 00:00	4 ft	669624-001
Bottomhole-2 (4')	S	08.06.2020 00:00	4 ft	669624-002
Bottomhole-3 (4')	S	08.06.2020 00:00	4 ft	669624-003
Bottomhole-4 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-004
Bottomhole-5 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-005
Bottomhole-6 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-006
Bottomhole-7 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-007
Bottomhole-8 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-008
Bottomhole-9 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-009
Bottomhole-10 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-010
Bottomhole-11 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-011
Bottomhole-12 (5')	S	08.06.2020 00:00	5 ft	669624-012
Bottomhole-13 (5')	S	08.06.2020 00:00	5 ft	669624-013
Bottomhole-14 (5')	S	08.06.2020 00:00	5 ft	669624-014
Bottomhole-15 (5')	S	08.06.2020 00:00	5 ft	669624-015
Bottomhole-16 (5')	S	08.06.2020 00:00	5 ft	669624-016
Bottomhole-17 (6')	S	08.06.2020 00:00	6 ft	669624-017
Bottomhole-18 (6')	S	08.06.2020 00:00	6 ft	669624-018
Bottomhole-19 (6')	S	08.06.2020 00:00	6 ft	669624-019
Bottomhole-20 (6')	S	08.06.2020 00:00	6 ft	669624-020
Bottomhole-21 (6')	S	08.06.2020 00:00	6 ft	669624-021
Bottomhole-22 (6')	S	08.06.2020 00:00	6 ft	669624-022
Bottomhole-23 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-023
Bottomhole-24 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-024
Bottomhole-25 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-025
Bottomhole-26 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-026
Bottomhole-27 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-027
Bottomhole-28 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-028
Bottomhole-29 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-029
Bottomhole-30 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-030
Bottomhole-31 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-031
Bottomhole-32 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-032
Bottomhole-33 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-033
Bottomhole-34 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-034
Bottomhole-35 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-035
Bottomhole-36 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-036
Bottomhole-37 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-037
Bottomhole-38 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-038
Bottomhole-39 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-039
Bottomhole-40 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-040
Bottomhole-41 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-041
Bottomhole-42 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-042
Bottomhole-43 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-043

Sample Cross Reference 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Bottomhole-44 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-044
Bottomhole-45 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-045
Bottomhole-46 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-046
Bottomhole-47 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-047
Bottomhole-48 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-048
Bottomhole-49 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-049
Bottomhole-50 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-050
Bottomhole-51 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-051
Bottomhole-52 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-052
Bottomhole-53 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-053
Bottomhole-54 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-054
Bottomhole-55 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-055
Bottomhole-56 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-056
Bottomhole-57 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-057
Bottomhole-58 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-058
Bottomhole-59 (4.5')	S	08.06.2020 00:00	4.5 ft	669624-059
Bottomhole-60 (1')	S	08.06.2020 00:00	1 ft	669624-060
Bottomhole-61 (1')	S	08.06.2020 00:00	1 ft	669624-061
Bottomhole-62 (1')	S	08.06.2020 00:00	1 ft	669624-062
Bottomhole-63 (1')	S	08.06.2020 00:00	1 ft	669624-063
Bottomhole-64 (1')	S	08.06.2020 00:00	1 ft	669624-064
Bottomhole-65 (1')	S	08.06.2020 00:00	1 ft	669624-065
Bottomhole-66 (1')	S	08.06.2020 00:00	1 ft	669624-066
Bottomhole-67 (1')	S	08.06.2020 00:00	1 ft	669624-067
Bottomhole-68 (1')	S	08.06.2020 00:00	1 ft	669624-068
Bottomhole-69 (1')	S	08.06.2020 00:00	1 ft	669624-069
Sidewall-1	S	08.06.2020 00:00	ft	669624-070
Sidewall-2	S	08.06.2020 00:00	ft	669624-071
Sidewall-3	S	08.06.2020 00:00	ft	669624-072
Sidewall-4	S	08.06.2020 00:00	ft	669624-073
Sidewall-5	S	08.06.2020 00:00	ft	669624-074
Sidewall-6	S	08.06.2020 00:00	ft	669624-075
Sidewall-7	S	08.06.2020 00:00	ft	669624-076
Sidewall-8	S	08.06.2020 00:00	ft	669624-077
Sidewall-9	S	08.06.2020 00:00	ft	669624-078
Sidewall-10	S	08.06.2020 00:00	ft	669624-079
Sidewall-11	S	08.06.2020 00:00	ft	669624-080
Sidewall-12	S	08.06.2020 00:00	ft	669624-081
Sidewall-13	S	08.06.2020 00:00	ft	669624-082
Sidewall-14	S	08.06.2020 00:00	ft	669624-083
Sidewall-15	S	08.06.2020 00:00	ft	669624-084
Sidewall-16	S	08.06.2020 00:00	ft	669624-085
Sidewall-17	S	08.06.2020 00:00	ft	669624-086
Sidewall-18	S	08.06.2020 00:00	ft	669624-087

Sample Cross Reference 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sidewall-19	S	08.06.2020 00:00	ft	669624-088
Sidewall-20	S	08.06.2020 00:00	ft	669624-089
Sidewall-21	S	08.06.2020 00:00	ft	669624-090
Sidewall-22	S	08.06.2020 00:00	ft	669624-091
Sidewall-23	S	08.06.2020 00:00	ft	669624-092
Sidewall-24	S	08.06.2020 00:00	ft	669624-093
Sidewall-25	S	08.06.2020 00:00	ft	669624-094
Sidewall-26	S	08.06.2020 00:00	ft	669624-095
Sidewall-27	S	08.06.2020 00:00	ft	669624-096
Sidewall-28	S	08.06.2020 00:00	ft	669624-097
Sidewall-29	S	08.06.2020 00:00	ft	669624-098
Sidewall-30	S	08.06.2020 00:00	ft	669624-099
Sidewall-31	S	08.06.2020 00:00	ft	669624-100
Sidewall-32	S	08.06.2020 00:00	ft	669624-101
Sidewall-33	S	08.06.2020 00:00	ft	669624-102
Sidewall-34	S	08.06.2020 00:00	ft	669624-103
Sidewall-35	S	08.06.2020 00:00	ft	669624-104
Sidewall-36	S	08.06.2020 00:00	ft	669624-105
Sidewall-37	S	08.06.2020 00:00	ft	669624-106
Sidewall-38	S	08.06.2020 00:00	ft	669624-107
Sidewall-39	S	08.06.2020 00:00	ft	669624-108
Sidewall-40	S	08.06.2020 00:00	ft	669624-109
Sidewall-41	S	08.06.2020 00:00	ft	669624-110
Sidewall-42	S	08.06.2020 00:00	ft	669624-111
Sidewall-43	S	08.06.2020 00:00	ft	669624-112
Sidewall-44	S	08.06.2020 00:00	ft	669624-113
Sidewall-45	S	08.06.2020 00:00	ft	669624-114
Sidewall-46	S	08.06.2020 00:00	ft	669624-115
Sidewall-47	S	08.06.2020 00:00	ft	669624-116
Sidewall-48	S	08.06.2020 00:00	ft	669624-117
Sidewall-49	S	08.06.2020 00:00	ft	669624-118
Sidewall-50	S	08.06.2020 00:00	ft	669624-119
Sidewall-51	S	08.06.2020 00:00	ft	669624-120
Sidewall-52	S	08.06.2020 00:00	ft	669624-121
Sidewall-53	S	08.06.2020 00:00	ft	669624-122
Sidewall-54	S	08.06.2020 00:00	ft	669624-123
Sidewall-55	S	08.06.2020 00:00	ft	669624-124
Sidewall-56	S	08.06.2020 00:00	ft	669624-125
Internal Sidewall-1	S	08.06.2020 00:00	ft	669624-126
Internal Sidewall-2	S	08.06.2020 00:00	ft	669624-127
Internal Sidewall-3	S	08.06.2020 00:00	ft	669624-128
Internal Sidewall-4	S	08.06.2020 00:00	ft	669624-129
Internal Sidewall-5	S	08.06.2020 00:00	ft	669624-130



CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Heartthrob Riser #7

Project ID: 212C-MD-02149
Work Order Number(s): 669624

Report Date: 08.13.2020
Date Received: 08.10.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-1 (4')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-001 Date Collected: 08.06.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.7	9.94	mg/kg	08.10.2020 16:29		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.10.2020 15:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.10.2020 15:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.10.2020 15:29	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.10.2020 15:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	08.10.2020 15:29	
o-Terphenyl	84-15-1	104	%	70-135	08.10.2020 15:29	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-1 (4')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-001 Date Collected: 08.06.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 14:50 Basis: Wet Weight
 Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 17:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 17:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 17:59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.10.2020 17:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 17:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 17:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 17:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.10.2020 17:59		
4-Bromofluorobenzene	460-00-4	112	%	70-130	08.10.2020 17:59		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-2 (4')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-002 Date Collected: 08.06.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	31.4	9.98	mg/kg	08.10.2020 16:46		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 16:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 16:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 16:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 16:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.10.2020 16:29	
o-Terphenyl	84-15-1	100	%	70-135	08.10.2020 16:29	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-2 (4')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-002 Date Collected: 08.06.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 14:50 Basis: Wet Weight
 Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 18:19	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 18:19	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 18:19	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 18:19	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 18:19	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 18:19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 18:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.10.2020 18:19		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.10.2020 18:19		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-3 (4')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-003 Date Collected: 08.06.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24.5	9.94	mg/kg	08.10.2020 16:51		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 16:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 16:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 16:49	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 16:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	08.10.2020 16:49	
o-Terphenyl	84-15-1	99	%	70-135	08.10.2020 16:49	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-3 (4')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-003 Date Collected: 08.06.2020 00:00 Sample Depth: 4 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 14:50 Basis: Wet Weight
 Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 18:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 18:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 18:39	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.10.2020 18:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 18:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 18:39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 18:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.10.2020 18:39		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.10.2020 18:39		



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Heartthrob Riser #7

Sample Id: **Bottomhole-4 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-004 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.6	10.0	mg/kg	08.10.2020 16:57		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 17:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 17:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 17:09	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 17:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	08.10.2020 17:09	
o-Terphenyl	84-15-1	101	%	70-135	08.10.2020 17:09	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-4 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-004

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 19:00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 19:00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 19:00	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.10.2020 19:00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 19:00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 19:00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 19:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.2020 19:00		
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.10.2020 19:00		



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Heartthrob Riser #7

Sample Id: **Bottomhole-5 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-005 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	43.0	10.1	mg/kg	08.10.2020 17:02		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.10.2020 17:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.10.2020 17:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.10.2020 17:30	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.10.2020 17:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	08.10.2020 17:30	
o-Terphenyl	84-15-1	100	%	70-135	08.10.2020 17:30	



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Heartthrob Riser #7

Sample Id: **Bottomhole-5 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-005

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.10.2020 19:20	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.10.2020 19:20	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.10.2020 19:20	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.10.2020 19:20	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.10.2020 19:20	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.10.2020 19:20	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.10.2020 19:20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.10.2020 19:20		
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.10.2020 19:20		



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Heartthrob Riser #7

Sample Id: **Bottomhole-6 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-006 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7200	49.7	mg/kg	08.10.2020 17:19		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 17:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 17:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 17:50	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 17:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	08.10.2020 17:50	
o-Terphenyl	84-15-1	101	%	70-135	08.10.2020 17:50	



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Heartthrob Riser #7

Sample Id: **Bottomhole-6 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-006

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 19:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 19:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 19:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 19:41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 19:41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 19:41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 19:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.10.2020 19:41		
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.10.2020 19:41		



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Heartthrob Riser #7

Sample Id: **Bottomhole-7 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-007 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6130	49.6	mg/kg	08.10.2020 17:25		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.10.2020 18:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.10.2020 18:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.10.2020 18:10	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.10.2020 18:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.10.2020 18:10	
o-Terphenyl	84-15-1	97	%	70-135	08.10.2020 18:10	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-7 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-007

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.10.2020 20:01	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.10.2020 20:01	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.10.2020 20:01	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.10.2020 20:01	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.10.2020 20:01	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.10.2020 20:01	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.10.2020 20:01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.10.2020 20:01		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.2020 20:01		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-8 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-008 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7210	49.5	mg/kg	08.10.2020 17:30		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.10.2020 18:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.10.2020 18:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.10.2020 18:31	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.10.2020 18:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	08.10.2020 18:31	
o-Terphenyl	84-15-1	100	%	70-135	08.10.2020 18:31	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-8 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-008

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.10.2020 20:21	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.10.2020 20:21	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.10.2020 20:21	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.10.2020 20:21	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.10.2020 20:21	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.10.2020 20:21	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.10.2020 20:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.2020 20:21		
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.10.2020 20:21		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-9 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-009 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6550	49.8	mg/kg	08.10.2020 17:36		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.10.2020 18:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.10.2020 18:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.10.2020 18:51	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.10.2020 18:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	08.10.2020 18:51	
o-Terphenyl	84-15-1	102	%	70-135	08.10.2020 18:51	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-9 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-009

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.10.2020 20:42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.10.2020 20:42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.10.2020 20:42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.10.2020 20:42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.10.2020 20:42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.10.2020 20:42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.10.2020 20:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.10.2020 20:42		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.2020 20:42		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-10 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-010 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6910	49.9	mg/kg	08.10.2020 17:41		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.10.2020 19:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.10.2020 19:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.10.2020 19:12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.10.2020 19:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.10.2020 19:12	
o-Terphenyl	84-15-1	101	%	70-135	08.10.2020 19:12	



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Heartthrob Riser #7

Sample Id: **Bottomhole-10 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-010

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 21:02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 21:02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 21:02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 21:02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 21:02	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 21:02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 21:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.10.2020 21:02		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.2020 21:02		



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Heartthrob Riser #7

Sample Id: **Bottomhole-11 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-011 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7450	49.8	mg/kg	08.10.2020 17:47		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.10.2020 19:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.10.2020 19:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.10.2020 19:52	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.10.2020 19:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	08.10.2020 19:52	
o-Terphenyl	84-15-1	100	%	70-135	08.10.2020 19:52	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-11 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-011

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.10.2020 22:18	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.10.2020 22:18	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.10.2020 22:18	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.10.2020 22:18	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.10.2020 22:18	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.10.2020 22:18	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.10.2020 22:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	08.10.2020 22:18		
1,4-Difluorobenzene	540-36-3	112	%	70-130	08.10.2020 22:18		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-12 (5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-012 Date Collected: 08.06.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1200	9.98	mg/kg	08.10.2020 18:04		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.10.2020 20:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.10.2020 20:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.10.2020 20:12	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.10.2020 20:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.10.2020 20:12	
o-Terphenyl	84-15-1	100	%	70-135	08.10.2020 20:12	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-12 (5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-012 Date Collected: 08.06.2020 00:00 Sample Depth: 5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 14:50 Basis: Wet Weight
 Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 22:38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 22:38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 22:38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 22:38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 22:38	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 22:38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 22:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.10.2020 22:38		
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.10.2020 22:38		



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Heartthrob Riser #7

Sample Id: **Bottomhole-13 (5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-013 Date Collected: 08.06.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1010	9.98	mg/kg	08.10.2020 18:09		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.10.2020 20:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.10.2020 20:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.10.2020 20:32	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.10.2020 20:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.10.2020 20:32	
o-Terphenyl	84-15-1	94	%	70-135	08.10.2020 20:32	



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Heartthrob Riser #7

Sample Id: **Bottomhole-13 (5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-013 Date Collected: 08.06.2020 00:00 Sample Depth: 5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 14:50 Basis: Wet Weight
 Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 22:59	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 22:59	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 22:59	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 22:59	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 22:59	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 22:59	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 22:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.10.2020 22:59		
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.10.2020 22:59		



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Heartthrob Riser #7

Sample Id: **Bottomhole-14 (5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-014 Date Collected: 08.06.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1250	50.2	mg/kg	08.10.2020 18:26		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.10.2020 20:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.10.2020 20:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.10.2020 20:52	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.10.2020 20:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	08.10.2020 20:52	
o-Terphenyl	84-15-1	102	%	70-135	08.10.2020 20:52	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-14 (5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-014

Date Collected: 08.06.2020 00:00

Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 23:19	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 23:19	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 23:19	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 23:19	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 23:19	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 23:19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 23:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	08.10.2020 23:19		
4-Bromofluorobenzene	460-00-4	116	%	70-130	08.10.2020 23:19		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-15 (5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-015 Date Collected: 08.06.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	782	10.1	mg/kg	08.10.2020 18:32		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.10.2020 21:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.10.2020 21:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.10.2020 21:12	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.10.2020 21:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	08.10.2020 21:12	
o-Terphenyl	84-15-1	103	%	70-135	08.10.2020 21:12	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-15 (5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-015

Date Collected: 08.06.2020 00:00

Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.10.2020 23:39	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.10.2020 23:39	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.10.2020 23:39	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.10.2020 23:39	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.10.2020 23:39	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.10.2020 23:39	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.10.2020 23:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.10.2020 23:39		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.10.2020 23:39		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-16 (5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-016 Date Collected: 08.06.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	967	10.1	mg/kg	08.10.2020 18:37		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.10.2020 21:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.10.2020 21:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.10.2020 21:33	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.10.2020 21:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.10.2020 21:33	
o-Terphenyl	84-15-1	97	%	70-135	08.10.2020 21:33	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-16 (5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-016 Date Collected: 08.06.2020 00:00 Sample Depth: 5 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 14:50 Basis: Wet Weight
 Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 00:00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 00:00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 00:00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 00:00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 00:00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 00:00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 00:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 00:00		
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 00:00		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-17 (6')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-017 Date Collected: 08.06.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1100	10.1	mg/kg	08.10.2020 18:43		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 21:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 21:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 21:53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 21:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	08.10.2020 21:53	
o-Terphenyl	84-15-1	97	%	70-135	08.10.2020 21:53	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-17 (6')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-017

Date Collected: 08.06.2020 00:00

Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 00:20	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 00:20	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 00:20	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.11.2020 00:20	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 00:20	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 00:20	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 00:20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.11.2020 00:20		
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.11.2020 00:20		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-18 (6')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-018 Date Collected: 08.06.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1460	50.4	mg/kg	08.10.2020 18:49		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.10.2020 22:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.10.2020 22:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.10.2020 22:14	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.10.2020 22:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	08.10.2020 22:14	
o-Terphenyl	84-15-1	102	%	70-135	08.10.2020 22:14	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-18 (6')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-018

Date Collected: 08.06.2020 00:00

Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 14:50

Basis: Wet Weight

Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 00:41	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 00:41	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 00:41	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 00:41	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 00:41	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 00:41	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 00:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 00:41		
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 00:41		



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Heartthrob Riser #7

Sample Id: **Bottomhole-19 (6')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-019 Date Collected: 08.06.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1630	49.9	mg/kg	08.10.2020 18:54		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.10.2020 22:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.10.2020 22:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.10.2020 22:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.10.2020 22:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	08.10.2020 22:34	
o-Terphenyl	84-15-1	100	%	70-135	08.10.2020 22:34	



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Heartthrob Riser #7

Sample Id: **Bottomhole-19 (6')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-019 Date Collected: 08.06.2020 00:00 Sample Depth: 6 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 14:50 Basis: Wet Weight
 Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 01:01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 01:01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 01:01	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 01:01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 01:01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 01:01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 01:01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.11.2020 01:01		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 01:01		



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Heartthrob Riser #7

Sample Id: **Bottomhole-20 (6')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-020 Date Collected: 08.06.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:07 Basis: Wet Weight
 Seq Number: 3134118

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1800	50.1	mg/kg	08.10.2020 19:00		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134114

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.10.2020 22:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.10.2020 22:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.10.2020 22:54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.10.2020 22:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	08.10.2020 22:54	
o-Terphenyl	84-15-1	100	%	70-135	08.10.2020 22:54	



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Heartthrob Riser #7

Sample Id: **Bottomhole-20 (6')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-020 Date Collected: 08.06.2020 00:00 Sample Depth: 6 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 14:50 Basis: Wet Weight
 Seq Number: 3134117

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 01:21	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 01:21	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 01:21	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 01:21	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 01:21	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 01:21	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 01:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 01:21		
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.11.2020 01:21		



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Heartthrob Riser #7

Sample Id: **Bottomhole-21 (6')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-021 Date Collected: 08.06.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1560	49.6	mg/kg	08.10.2020 19:33		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.10.2020 18:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.10.2020 18:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.10.2020 18:31	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.10.2020 18:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	08.10.2020 18:31	
o-Terphenyl	84-15-1	116	%	70-135	08.10.2020 18:31	



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Heartthrob Riser #7

Sample Id: **Bottomhole-21 (6')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-021 Date Collected: 08.06.2020 00:00 Sample Depth: 6 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:33 Basis: Wet Weight
 Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 18:11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 18:11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 18:11	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.10.2020 18:11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 18:11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 18:11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 18:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.10.2020 18:11		
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.10.2020 18:11		



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Heartthrob Riser #7

Sample Id: **Bottomhole-22 (6')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-022 Date Collected: 08.06.2020 00:00 Sample Depth: 6 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1820	49.9	mg/kg	08.10.2020 19:50		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.10.2020 18:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.10.2020 18:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.10.2020 18:51	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.10.2020 18:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	08.10.2020 18:51	
o-Terphenyl	84-15-1	109	%	70-135	08.10.2020 18:51	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-22 (6')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-022

Date Collected: 08.06.2020 00:00

Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.10.2020 20:14	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.10.2020 20:14	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.10.2020 20:14	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.10.2020 20:14	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.10.2020 20:14	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.10.2020 20:14	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.10.2020 20:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.10.2020 20:14		
4-Bromofluorobenzene	460-00-4	97	%	70-130	08.10.2020 20:14		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-23 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-023 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1680	50.1	mg/kg	08.10.2020 19:55		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.10.2020 19:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.10.2020 19:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.10.2020 19:12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.10.2020 19:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	08.10.2020 19:12	
o-Terphenyl	84-15-1	107	%	70-135	08.10.2020 19:12	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-23 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-023

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 20:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 20:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 20:37	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.10.2020 20:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 20:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 20:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 20:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.2020 20:37		
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.10.2020 20:37		



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Heartthrob Riser #7

Sample Id: **Bottomhole-24 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-024 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6510	50.2	mg/kg	08.10.2020 20:01		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.10.2020 19:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.10.2020 19:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.10.2020 19:52	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.10.2020 19:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.10.2020 19:52	
o-Terphenyl	84-15-1	111	%	70-135	08.10.2020 19:52	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-24 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-024

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 20:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 20:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 20:59	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.10.2020 20:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 20:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 20:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 20:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.10.2020 20:59		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.10.2020 20:59		



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Heartthrob Riser #7

Sample Id: **Bottomhole-25 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-025 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5860	49.9	mg/kg	08.10.2020 20:07		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.10.2020 20:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.10.2020 20:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.10.2020 20:12	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.10.2020 20:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	08.10.2020 20:12	
o-Terphenyl	84-15-1	109	%	70-135	08.10.2020 20:12	



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Heartthrob Riser #7

Sample Id: **Bottomhole-25 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-025

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.10.2020 21:22	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.10.2020 21:22	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.10.2020 21:22	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.10.2020 21:22	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.10.2020 21:22	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.10.2020 21:22	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.10.2020 21:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.10.2020 21:22		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.2020 21:22		



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Heartthrob Riser #7

Sample Id: **Bottomhole-26 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-026 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5300	49.6	mg/kg	08.10.2020 20:23		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.10.2020 20:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.10.2020 20:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.10.2020 20:32	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.10.2020 20:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	08.10.2020 20:32	
o-Terphenyl	84-15-1	106	%	70-135	08.10.2020 20:32	



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Heartthrob Riser #7

Sample Id: **Bottomhole-26 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-026

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 21:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 21:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 21:44	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.10.2020 21:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 21:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 21:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 21:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.2020 21:44		
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.10.2020 21:44		



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Heartthrob Riser #7

Sample Id: **Bottomhole-27 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-027 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6190	49.7	mg/kg	08.10.2020 20:29		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.10.2020 20:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.10.2020 20:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.10.2020 20:52	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.10.2020 20:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	08.10.2020 20:52	
o-Terphenyl	84-15-1	112	%	70-135	08.10.2020 20:52	



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Heartthrob Riser #7

Sample Id: **Bottomhole-27 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-027

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 22:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 22:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 22:07	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.10.2020 22:07	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 22:07	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 22:07	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 22:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.10.2020 22:07		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.10.2020 22:07		



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Heartthrob Riser #7

Sample Id: **Bottomhole-28 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-028 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1920	49.8	mg/kg	08.10.2020 20:35		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.10.2020 21:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.10.2020 21:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.10.2020 21:12	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.10.2020 21:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	08.10.2020 21:12	
o-Terphenyl	84-15-1	107	%	70-135	08.10.2020 21:12	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-28 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-028

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 23:25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 23:25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 23:25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 23:25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 23:25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 23:25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 23:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	97	%	70-130	08.10.2020 23:25		
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.10.2020 23:25		



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Heartthrob Riser #7

Sample Id: **Bottomhole-29 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-029 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1410	49.9	mg/kg	08.10.2020 20:40		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.10.2020 21:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.10.2020 21:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.10.2020 21:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.10.2020 21:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	08.10.2020 21:33	
o-Terphenyl	84-15-1	106	%	70-135	08.10.2020 21:33	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-29 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-029

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.10.2020 23:47	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.10.2020 23:47	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.10.2020 23:47	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.10.2020 23:47	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.10.2020 23:47	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.10.2020 23:47	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.10.2020 23:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.10.2020 23:47		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.10.2020 23:47		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-30 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-030 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1920	49.7	mg/kg	08.10.2020 20:46		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 15:15 Basis: Wet Weight
 Seq Number: 3134122

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 21:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 21:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 21:53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 21:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.10.2020 21:53	
o-Terphenyl	84-15-1	108	%	70-135	08.10.2020 21:53	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-30 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-030

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 00:10	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 00:10	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 00:10	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.11.2020 00:10	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 00:10	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 00:10	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 00:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 00:10		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 00:10		



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Heartthrob Riser #7

Sample Id: **Bottomhole-31 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-031 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1860	50.0	mg/kg	08.10.2020 20:51		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 12:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 12:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 12:27	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 12:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	08.11.2020 12:27	
o-Terphenyl	84-15-1	106	%	70-135	08.11.2020 12:27	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-31 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-031

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 00:32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 00:32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 00:32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 00:32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 00:32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 00:32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 00:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 00:32		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 00:32		



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Heartthrob Riser #7

Sample Id: **Bottomhole-32 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-032 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5840	49.8	mg/kg	08.10.2020 21:08		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.11.2020 13:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.11.2020 13:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.11.2020 13:29	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.11.2020 13:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.11.2020 13:29	
o-Terphenyl	84-15-1	110	%	70-135	08.11.2020 13:29	



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Heartthrob Riser #7

Sample Id: **Bottomhole-32 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-032

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 00:55	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 00:55	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 00:55	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 00:55	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 00:55	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 00:55	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 00:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 00:55		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 00:55		



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Heartthrob Riser #7

Sample Id: **Bottomhole-33 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-033 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4700	50.1	mg/kg	08.10.2020 21:14		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.11.2020 13:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.11.2020 13:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.11.2020 13:49	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.11.2020 13:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	08.11.2020 13:49	
o-Terphenyl	84-15-1	99	%	70-135	08.11.2020 13:49	



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Heartthrob Riser #7

Sample Id: **Bottomhole-33 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-033

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 01:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 01:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 01:17	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 01:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 01:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 01:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 01:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.11.2020 01:17		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 01:17		



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Heartthrob Riser #7

Sample Id: **Bottomhole-34 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-034 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5570	50.3	mg/kg	08.10.2020 21:30		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 14:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 14:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 14:09	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 14:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	08.11.2020 14:09	
o-Terphenyl	84-15-1	101	%	70-135	08.11.2020 14:09	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-34 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-034

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 01:40	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 01:40	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 01:40	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.11.2020 01:40	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 01:40	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 01:40	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 01:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 01:40		
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 01:40		



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Heartthrob Riser #7

Sample Id: **Bottomhole-35 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-035 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6490	50.5	mg/kg	08.10.2020 21:36		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 14:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 14:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 14:30	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 14:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.11.2020 14:30	
o-Terphenyl	84-15-1	97	%	70-135	08.11.2020 14:30	



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Heartthrob Riser #7

Sample Id: **Bottomhole-35 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-035

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 02:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 02:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 02:02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 02:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 02:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 02:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 02:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 02:02		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 02:02		



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Heartthrob Riser #7

Sample Id: **Bottomhole-36 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-036 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5690	50.0	mg/kg	08.10.2020 21:41		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 14:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 14:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 14:50	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 14:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.11.2020 14:50	
o-Terphenyl	84-15-1	101	%	70-135	08.11.2020 14:50	



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Heartthrob Riser #7

Sample Id: **Bottomhole-36 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-036

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 02:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 02:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 02:24	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 02:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 02:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 02:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 02:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 02:24		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 02:24		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-37 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-037 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6290	49.9	mg/kg	08.10.2020 21:47		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.11.2020 15:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.11.2020 15:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.11.2020 15:11	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.11.2020 15:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.11.2020 15:11	
o-Terphenyl	84-15-1	100	%	70-135	08.11.2020 15:11	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-37 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-037

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 15:33

Basis: Wet Weight

Seq Number: 3134096

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 02:47	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 02:47	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 02:47	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 02:47	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 02:47	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 02:47	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 02:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 02:47		
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 02:47		



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Heartthrob Riser #7

Sample Id: **Bottomhole-38 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-038 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3080	49.8	mg/kg	08.10.2020 21:53		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.11.2020 15:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.11.2020 15:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.11.2020 15:31	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.11.2020 15:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.11.2020 15:31	
o-Terphenyl	84-15-1	97	%	70-135	08.11.2020 15:31	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-38 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-038

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 04:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 04:54		
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 04:54		



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Heartthrob Riser #7

Sample Id: **Bottomhole-39 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-039 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3300	49.9	mg/kg	08.10.2020 21:58		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 15:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 15:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 15:51	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 15:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	08.11.2020 15:51	
o-Terphenyl	84-15-1	102	%	70-135	08.11.2020 15:51	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-39 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-039

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 05:15	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 05:15	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 05:15	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.11.2020 05:15	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 05:15	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 05:15	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 05:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 05:15		
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.11.2020 05:15		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-40 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-040 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 17:15 Basis: Wet Weight
 Seq Number: 3134120

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2960	50.0	mg/kg	08.10.2020 22:04		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.11.2020 16:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.11.2020 16:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.11.2020 16:11	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.11.2020 16:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.11.2020 16:11	
o-Terphenyl	84-15-1	101	%	70-135	08.11.2020 16:11	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-40 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-040

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 05:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 05:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 05:35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 05:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 05:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 05:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 05:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.11.2020 05:35		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 05:35		



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Heartthrob Riser #7

Sample Id: **Bottomhole-41 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-041 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4450	50.0	mg/kg	08.10.2020 22:37		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.11.2020 16:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.11.2020 16:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.11.2020 16:52	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.11.2020 16:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.11.2020 16:52	
o-Terphenyl	84-15-1	98	%	70-135	08.11.2020 16:52	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-41 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-041

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 05:55	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 05:55	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 05:55	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 05:55	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 05:55	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 05:55	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 05:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 05:55		
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.11.2020 05:55		



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Heartthrob Riser #7

Sample Id: **Bottomhole-42 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-042 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4040	50.4	mg/kg	08.10.2020 23:11		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 17:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 17:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 17:12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 17:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.11.2020 17:12	
o-Terphenyl	84-15-1	96	%	70-135	08.11.2020 17:12	



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Heartthrob Riser #7

Sample Id: **Bottomhole-42 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-042

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 06:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 06:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 06:16	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 06:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 06:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 06:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 06:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 06:16		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 06:16		



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Heartthrob Riser #7

Sample Id: **Bottomhole-43 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-043 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3900	50.1	mg/kg	08.10.2020 23:16		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.11.2020 17:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.11.2020 17:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.11.2020 17:32	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.11.2020 17:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	08.11.2020 17:32	
o-Terphenyl	84-15-1	99	%	70-135	08.11.2020 17:32	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-43 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-043

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 06:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 06:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 06:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 06:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 06:36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 06:36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 06:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 06:36		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 06:36		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-44 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-044 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6520	50.1	mg/kg	08.10.2020 23:33		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 17:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 17:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 17:52	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 17:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.11.2020 17:52	
o-Terphenyl	84-15-1	98	%	70-135	08.11.2020 17:52	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-44 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-044

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 06:57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 06:57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 06:57	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 06:57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 06:57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 06:57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 06:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.11.2020 06:57		
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.11.2020 06:57		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-45 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-045 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6400	49.6	mg/kg	08.10.2020 23:39		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.11.2020 18:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.11.2020 18:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.11.2020 18:12	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.11.2020 18:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.11.2020 18:12	
o-Terphenyl	84-15-1	95	%	70-135	08.11.2020 18:12	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-45 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-045

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 07:17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 07:17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 07:17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 07:17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 07:17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 07:17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 07:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.11.2020 07:17		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 07:17		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-46 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-046 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6610	49.9	mg/kg	08.10.2020 23:44		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.11.2020 18:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.11.2020 18:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.11.2020 18:33	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.11.2020 18:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.11.2020 18:33	
o-Terphenyl	84-15-1	93	%	70-135	08.11.2020 18:33	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-46 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-046

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 07:37	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 07:37	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 07:37	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 07:37	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 07:37	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 07:37	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 07:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 07:37		
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.11.2020 07:37		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-47 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-047 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6780	49.6	mg/kg	08.10.2020 23:50		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.11.2020 18:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.11.2020 18:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.11.2020 18:53	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.11.2020 18:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.11.2020 18:53	
o-Terphenyl	84-15-1	102	%	70-135	08.11.2020 18:53	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-47 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-047

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 07:58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 07:58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 07:58	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.11.2020 07:58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 07:58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 07:58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 07:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.11.2020 07:58		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 07:58		



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Heartthrob Riser #7

Sample Id: **Bottomhole-48 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-048 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5750	49.6	mg/kg	08.10.2020 23:55		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.11.2020 19:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.11.2020 19:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.11.2020 19:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.11.2020 19:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.11.2020 19:14	
o-Terphenyl	84-15-1	98	%	70-135	08.11.2020 19:14	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-48 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-048

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 09:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 09:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 09:14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 09:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 09:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 09:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 09:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 09:14		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 09:14		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-49 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-049 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6130	49.4	mg/kg	08.11.2020 00:12		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.11.2020 19:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.11.2020 19:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.11.2020 19:34	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.11.2020 19:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	08.11.2020 19:34	
o-Terphenyl	84-15-1	97	%	70-135	08.11.2020 19:34	



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Heartthrob Riser #7

Sample Id: **Bottomhole-49 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-049

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 09:34	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 09:34	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 09:34	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 09:34	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 09:34	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 09:34	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 09:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.11.2020 09:34		
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 09:34		



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Heartthrob Riser #7

Sample Id: **Bottomhole-50 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-050 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5420	49.9	mg/kg	08.11.2020 00:18		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134232

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 19:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 19:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 19:54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 19:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.11.2020 19:54	
o-Terphenyl	84-15-1	99	%	70-135	08.11.2020 19:54	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-50 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-050

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 09:54	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 09:54	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 09:54	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 09:54	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 09:54	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 09:54	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 09:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.11.2020 09:54		
4-Bromofluorobenzene	460-00-4	96	%	70-130	08.11.2020 09:54		



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Heartthrob Riser #7

Sample Id: **Bottomhole-51 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-051 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1610	49.8	mg/kg	08.11.2020 00:34		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 12:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 12:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 12:27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 12:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	08.11.2020 12:27	
o-Terphenyl	84-15-1	118	%	70-135	08.11.2020 12:27	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-51 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-051

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 10:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 10:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 10:15	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 10:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 10:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 10:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 10:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 10:15		
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.11.2020 10:15		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-52 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-052 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2380	49.9	mg/kg	08.11.2020 00:40		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.11.2020 13:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.11.2020 13:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.11.2020 13:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.11.2020 13:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.11.2020 13:29	
o-Terphenyl	84-15-1	108	%	70-135	08.11.2020 13:29	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-52 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-052

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 10:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 10:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 10:35	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 10:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 10:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 10:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 10:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 10:35		
1,4-Difluorobenzene	540-36-3	96	%	70-130	08.11.2020 10:35		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-53 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-053 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1800	50.1	mg/kg	08.11.2020 00:45		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.11.2020 13:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.11.2020 13:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.11.2020 13:49	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.11.2020 13:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.11.2020 13:49	
o-Terphenyl	84-15-1	107	%	70-135	08.11.2020 13:49	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-53 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-053

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 10:56	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 10:56	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 10:56	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.11.2020 10:56	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 10:56	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 10:56	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 10:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.11.2020 10:56		
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.11.2020 10:56		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-54 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-054 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.5	10.1	mg/kg	08.11.2020 00:51		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.11.2020 14:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.11.2020 14:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.11.2020 14:09	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.11.2020 14:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.11.2020 14:09	
o-Terphenyl	84-15-1	105	%	70-135	08.11.2020 14:09	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-54 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-054

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 11:16	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 11:16	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 11:16	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	08.11.2020 11:16	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 11:16	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 11:16	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 11:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.11.2020 11:16		
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.11.2020 11:16		



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Heartthrob Riser #7

Sample Id: **Bottomhole-55 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-055 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.9	10.0	mg/kg	08.11.2020 00:57		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.11.2020 14:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.11.2020 14:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.11.2020 14:30	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.11.2020 14:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	08.11.2020 14:30	
o-Terphenyl	84-15-1	103	%	70-135	08.11.2020 14:30	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-55 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-055

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 11:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 11:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 11:36	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 11:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 11:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 11:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 11:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.11.2020 11:36		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 11:36		



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Heartthrob Riser #7

Sample Id: **Bottomhole-56 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-056 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.6	10.0	mg/kg	08.11.2020 01:02		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.11.2020 14:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.11.2020 14:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.11.2020 14:50	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.11.2020 14:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	08.11.2020 14:50	
o-Terphenyl	84-15-1	112	%	70-135	08.11.2020 14:50	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-56 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-056

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 11:57	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 11:57	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 11:57	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.11.2020 11:57	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 11:57	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 11:57	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 11:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.11.2020 11:57		
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.11.2020 11:57		



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Heartthrob Riser #7

Sample Id: **Bottomhole-57 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-057 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 15:41 Basis: Wet Weight
 Seq Number: 3134099

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.8	9.98	mg/kg	08.11.2020 01:08		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 15:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 15:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 15:11	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 15:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	08.11.2020 15:11	
o-Terphenyl	84-15-1	105	%	70-135	08.11.2020 15:11	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-57 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-057

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:57

Basis: Wet Weight

Seq Number: 3134240

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 12:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 12:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 12:17	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 12:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 12:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 12:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 12:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 12:17		
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.11.2020 12:17		



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Heartthrob Riser #7

Sample Id: **Bottomhole-58 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-058 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.8	9.90	mg/kg	08.11.2020 14:51		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.11.2020 15:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.11.2020 15:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.11.2020 15:31	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.11.2020 15:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.11.2020 15:31	
o-Terphenyl	84-15-1	103	%	70-135	08.11.2020 15:31	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-58 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-058

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 06:52	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 06:52	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 06:52	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 06:52	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 06:52	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 06:52	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 06:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.11.2020 06:52		
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.11.2020 06:52		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-59 (4.5')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-059 Date Collected: 08.06.2020 00:00 Sample Depth: 4.5 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	08.11.2020 15:07	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.11.2020 15:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.11.2020 15:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.11.2020 15:51	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.11.2020 15:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	08.11.2020 15:51	
o-Terphenyl	84-15-1	107	%	70-135	08.11.2020 15:51	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-59 (4.5')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-059

Date Collected: 08.06.2020 00:00

Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 07:15	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 07:15	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 07:15	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 07:15	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 07:15	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 07:15	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 07:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 07:15		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 07:15		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-60 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-060 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.0	9.98	mg/kg	08.11.2020 15:13		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 16:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 16:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 16:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 16:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	08.11.2020 16:11	
o-Terphenyl	84-15-1	108	%	70-135	08.11.2020 16:11	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-60 (1')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-060

Date Collected: 08.06.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 07:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 07:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 07:37	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 07:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 07:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 07:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 07:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 07:37		
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 07:37		



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Heartthrob Riser #7

Sample Id: **Bottomhole-61 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-061 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	08.11.2020 15:19	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 16:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 16:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 16:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 16:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	08.11.2020 16:52	
o-Terphenyl	84-15-1	105	%	70-135	08.11.2020 16:52	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-61 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-061 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:03 Basis: Wet Weight
 Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 08:00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 08:00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 08:00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 08:00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 08:00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 08:00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 08:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 08:00		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 08:00		



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Heartthrob Riser #7

Sample Id: **Bottomhole-62 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-062 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	08.11.2020 15:24	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 17:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 17:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 17:12	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 17:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	08.11.2020 17:12	
o-Terphenyl	84-15-1	105	%	70-135	08.11.2020 17:12	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-62 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-062 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:03 Basis: Wet Weight
 Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 08:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 08:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 08:32	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 08:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 08:32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 08:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 08:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 08:32		
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.11.2020 08:32		



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Heartthrob Riser #7

Sample Id: **Bottomhole-63 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-063 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	08.11.2020 15:41	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 17:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 17:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 17:32	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 17:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	08.11.2020 17:32	
o-Terphenyl	84-15-1	109	%	70-135	08.11.2020 17:32	



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Heartthrob Riser #7

Sample Id: **Bottomhole-63 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-063 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:03 Basis: Wet Weight
 Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 08:45	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 08:45	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 08:45	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 08:45	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 08:45	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 08:45	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 08:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 08:45		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 08:45		



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Heartthrob Riser #7

Sample Id: **Bottomhole-64 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-064 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	08.11.2020 15:46	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 17:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 17:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 17:52	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 17:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	08.11.2020 17:52	
o-Terphenyl	84-15-1	108	%	70-135	08.11.2020 17:52	



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Heartthrob Riser #7

Sample Id: **Bottomhole-64 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-064 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:03 Basis: Wet Weight
 Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 09:07	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 09:07	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 09:07	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	08.11.2020 09:07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 09:07	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 09:07	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 09:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 09:07		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 09:07		



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Heartthrob Riser #7

Sample Id: **Bottomhole-65 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-065 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	08.11.2020 15:52	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 18:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 18:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 18:12	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 18:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	08.11.2020 18:12	
o-Terphenyl	84-15-1	106	%	70-135	08.11.2020 18:12	



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Heartthrob Riser #7

Sample Id: **Bottomhole-65 (1')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-065

Date Collected: 08.06.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 09:30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 09:30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 09:30	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 09:30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 09:30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 09:30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 09:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.11.2020 09:30		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 09:30		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-66 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-066 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.7	9.88	mg/kg	08.11.2020 15:58		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.11.2020 18:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.11.2020 18:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.11.2020 18:33	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.11.2020 18:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.11.2020 18:33	
o-Terphenyl	84-15-1	104	%	70-135	08.11.2020 18:33	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-66 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-066 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:03 Basis: Wet Weight
 Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 09:52	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 09:52	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 09:52	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.11.2020 09:52	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 09:52	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 09:52	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 09:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 09:52		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 09:52		



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Heartthrob Riser #7

Sample Id: **Bottomhole-67 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-067 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.3	9.98	mg/kg	08.11.2020 16:03		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.11.2020 18:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.11.2020 18:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.11.2020 18:53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.11.2020 18:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.11.2020 18:53	
o-Terphenyl	84-15-1	107	%	70-135	08.11.2020 18:53	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-67 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-067 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:03 Basis: Wet Weight
 Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 10:14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 10:14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 10:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 10:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 10:14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 10:14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 10:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 10:14		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 10:14		



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Heartthrob Riser #7

Sample Id: **Bottomhole-68 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-068 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	08.11.2020 16:09	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 19:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 19:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 19:14	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 19:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	08.11.2020 19:14	
o-Terphenyl	84-15-1	104	%	70-135	08.11.2020 19:14	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-68 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-068 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.10.2020 16:03 Basis: Wet Weight
 Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 11:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 11:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 11:33	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 11:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 11:33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 11:33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 11:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.11.2020 11:33		
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.11.2020 11:33		



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Heartthrob Riser #7

Sample Id: **Bottomhole-69 (1')** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-069 Date Collected: 08.06.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.0	9.98	mg/kg	08.11.2020 16:25		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.11.2020 19:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.11.2020 19:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.11.2020 19:34	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.11.2020 19:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	08.11.2020 19:34	
o-Terphenyl	84-15-1	107	%	70-135	08.11.2020 19:34	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Bottomhole-69 (1')**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-069

Date Collected: 08.06.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 11:55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 11:55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 11:55	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	08.11.2020 11:55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 11:55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 11:55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 11:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 11:55		
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 11:55		



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Heartthrob Riser #7

Sample Id: **Sidewall-1** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-070 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.7	10.0	mg/kg	08.11.2020 16:31		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.10.2020 17:30 Basis: Wet Weight
 Seq Number: 3134266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.11.2020 19:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.11.2020 19:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.11.2020 19:54	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.11.2020 19:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	08.11.2020 19:54	
o-Terphenyl	84-15-1	80	%	70-135	08.11.2020 19:54	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-1**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-070

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 12:18	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 12:18	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 12:18	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 12:18	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 12:18	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 12:18	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 12:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 12:18		
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 12:18		



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Heartthrob Riser #7

Sample Id: **Sidewall-2** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-071 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.6	9.88	mg/kg	08.11.2020 16:48		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:00 Basis: Wet Weight
 Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 22:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 22:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 22:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 22:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	08.11.2020 22:15	
o-Terphenyl	84-15-1	99	%	70-135	08.11.2020 22:15	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-2**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-071

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 12:40	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 12:40	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 12:40	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 12:40	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 12:40	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 12:40	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 12:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 12:40		
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 12:40		



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Heartthrob Riser #7

Sample Id: **Sidewall-3** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-072 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.1	9.98	mg/kg	08.11.2020 16:53		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:00 Basis: Wet Weight
 Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.11.2020 23:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.11.2020 23:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.11.2020 23:16	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.11.2020 23:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.11.2020 23:16	
o-Terphenyl	84-15-1	90	%	70-135	08.11.2020 23:16	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-3**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-072

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 13:03	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 13:03	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 13:03	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	08.11.2020 13:03	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 13:03	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 13:03	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 13:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 13:03		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 13:03		



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Heartthrob Riser #7

Sample Id: **Sidewall-4** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-073 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	47.2	9.96	mg/kg	08.11.2020 16:59		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:00 Basis: Wet Weight
 Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.11.2020 23:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.11.2020 23:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.11.2020 23:36	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.11.2020 23:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.11.2020 23:36	
o-Terphenyl	84-15-1	99	%	70-135	08.11.2020 23:36	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-4**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-073

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 13:25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 13:25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 13:25	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 13:25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 13:25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 13:25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 13:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 13:25		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 13:25		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-5** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-074 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.9	9.98	mg/kg	08.11.2020 17:04		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:00 Basis: Wet Weight
 Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 23:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 23:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 23:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 23:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	08.11.2020 23:56	
o-Terphenyl	84-15-1	101	%	70-135	08.11.2020 23:56	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-5**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-074

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 13:48	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 13:48	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 13:48	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 13:48	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 13:48	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 13:48	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 13:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 13:48		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 13:48		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-6** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-075 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	08.11.2020 17:10	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:00 Basis: Wet Weight
 Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 00:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 00:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 00:17	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 00:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.12.2020 00:17	
o-Terphenyl	84-15-1	79	%	70-135	08.12.2020 00:17	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-6**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-075

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 14:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 14:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 14:10	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 14:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 14:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 14:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 14:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 14:10		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 14:10		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-7** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-076 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 15:03 Basis: Wet Weight
 Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	08.11.2020 17:16	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:00 Basis: Wet Weight
 Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 00:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 00:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 00:37	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 00:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.12.2020 00:37	
o-Terphenyl	84-15-1	81	%	70-135	08.12.2020 00:37	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-7**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-076

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 14:33	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 14:33	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 14:33	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 14:33	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 14:33	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 14:33	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 14:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.11.2020 14:33		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 14:33		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-8**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-077

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 15:03

Basis: Wet Weight

Seq Number: 3134246

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	124	9.92	mg/kg	08.11.2020 17:21		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.12.2020 00:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.12.2020 00:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.12.2020 00:57	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.12.2020 00:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.12.2020 00:57	
o-Terphenyl	84-15-1	91	%	70-135	08.12.2020 00:57	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-8**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-077

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.10.2020 16:03

Basis: Wet Weight

Seq Number: 3134241

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 14:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 14:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 14:55	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 14:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 14:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 14:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 14:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 14:55		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 14:55		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-9** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-078 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 10:10 Basis: Wet Weight
 Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	176	9.94	mg/kg	08.11.2020 17:55		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:00 Basis: Wet Weight
 Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 01:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 01:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 01:17	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 01:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.12.2020 01:17	
o-Terphenyl	84-15-1	94	%	70-135	08.12.2020 01:17	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-9**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-078

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 18:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 18:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 18:39	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 18:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 18:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 18:39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 18:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.11.2020 18:39		
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.11.2020 18:39		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-10**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-079

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	201	9.98	mg/kg	08.11.2020 18:12		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 01:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 01:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 01:37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 01:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	08.12.2020 01:37	
o-Terphenyl	84-15-1	91	%	70-135	08.12.2020 01:37	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-10**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-079

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 19:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.11.2020 19:02		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 19:02		



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Heartthrob Riser #7

Sample Id: **Sidewall-11**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-080

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.88	9.88	mg/kg	08.11.2020 18:17	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 01:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 01:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 01:58	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 01:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.12.2020 01:58	
o-Terphenyl	84-15-1	90	%	70-135	08.12.2020 01:58	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-11**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-080

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 19:24	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 19:24	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 19:24	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 19:24	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 19:24	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 19:24	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 19:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	08.11.2020 19:24		
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 19:24		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-12**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-081

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.4	9.92	mg/kg	08.11.2020 18:23		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 02:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 02:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 02:38	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 02:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.12.2020 02:38	
o-Terphenyl	84-15-1	94	%	70-135	08.12.2020 02:38	



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-12**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-081

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 19:47	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 19:47	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 19:47	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 19:47	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 19:47	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 19:47	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 19:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 19:47		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 19:47		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-13**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-082

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.1	9.96	mg/kg	08.11.2020 18:29		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 02:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 02:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 02:59	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 02:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.12.2020 02:59	
o-Terphenyl	84-15-1	94	%	70-135	08.12.2020 02:59	



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-13**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-082

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 20:09	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 20:09	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 20:09	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 20:09	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 20:09	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 20:09	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 20:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 20:09		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 20:09		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-14**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-083

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.2	9.98	mg/kg	08.11.2020 18:45		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 03:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 03:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 03:19	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 03:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.12.2020 03:19	
o-Terphenyl	84-15-1	96	%	70-135	08.12.2020 03:19	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-14**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-083

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 20:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 20:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 20:32	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 20:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 20:32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 20:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 20:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 20:32		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 20:32		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-15**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-084

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	08.11.2020 18:51	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 03:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 03:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 03:39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 03:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.12.2020 03:39	
o-Terphenyl	84-15-1	98	%	70-135	08.12.2020 03:39	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-15**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-084

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 20:54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 20:54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 20:54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 20:54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 20:54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 20:54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 20:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 20:54		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 20:54		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-16**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-085

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.90	9.90	mg/kg	08.11.2020 18:56	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.12.2020 03:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.12.2020 03:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.12.2020 03:59	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.12.2020 03:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.12.2020 03:59	
o-Terphenyl	84-15-1	94	%	70-135	08.12.2020 03:59	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-16**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-085

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 21:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 21:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 21:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 21:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 21:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 21:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 21:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 21:17		
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.11.2020 21:17		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-17**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-086

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	08.11.2020 19:02	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.12.2020 04:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.12.2020 04:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.12.2020 04:20	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.12.2020 04:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	08.12.2020 04:20	
o-Terphenyl	84-15-1	95	%	70-135	08.12.2020 04:20	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-17**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-086

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 21:39	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 21:39	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 21:39	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.11.2020 21:39	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 21:39	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 21:39	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 21:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 21:39		
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 21:39		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-18**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-087

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.2	9.96	mg/kg	08.11.2020 19:08		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 04:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 04:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 04:40	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 04:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.12.2020 04:40	
o-Terphenyl	84-15-1	95	%	70-135	08.12.2020 04:40	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-18**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-087

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 22:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 22:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 22:02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 22:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 22:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 22:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 22:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 22:02		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 22:02		



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-19**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-088

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29.1	9.90	mg/kg	08.11.2020 19:13		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 05:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 05:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 05:00	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 05:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.12.2020 05:00	
o-Terphenyl	84-15-1	98	%	70-135	08.12.2020 05:00	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-19**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-088

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 23:20	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 23:20	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 23:20	U	1
m,p-Xylenes	179601-23-1	<0.00395	0.00395	mg/kg	08.11.2020 23:20	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 23:20	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 23:20	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 23:20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.11.2020 23:20		
4-Bromofluorobenzene	460-00-4	95	%	70-130	08.11.2020 23:20		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-20**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-089

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	28.7	9.98	mg/kg	08.11.2020 19:30		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 05:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 05:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 05:20	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 05:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.12.2020 05:20	
o-Terphenyl	84-15-1	94	%	70-135	08.12.2020 05:20	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-20**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-089

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 23:42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 23:42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 23:42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 23:42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 23:42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 23:42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 23:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.11.2020 23:42		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 23:42		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-21**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-090

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	41.4	9.98	mg/kg	08.11.2020 19:35		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134250

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 05:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 05:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 05:40	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 05:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.12.2020 05:40	
o-Terphenyl	84-15-1	94	%	70-135	08.12.2020 05:40	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-21**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-090

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.12.2020 00:05	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.12.2020 00:05	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.12.2020 00:05	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.12.2020 00:05	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.12.2020 00:05	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.12.2020 00:05	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.12.2020 00:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.12.2020 00:05		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.12.2020 00:05		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-22**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-091

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	46.2	9.96	mg/kg	08.11.2020 19:52		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 08:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 08:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 08:02	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 08:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.12.2020 08:02	
o-Terphenyl	84-15-1	109	%	70-135	08.12.2020 08:02	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-22**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-091

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.12.2020 00:27	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.12.2020 00:27	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.12.2020 00:27	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.12.2020 00:27	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.12.2020 00:27	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.12.2020 00:27	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.12.2020 00:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.12.2020 00:27		
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.12.2020 00:27		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-23**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-092

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	263	10.0	mg/kg	08.11.2020 19:58		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 09:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 09:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 09:03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 09:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	08.12.2020 09:03	
o-Terphenyl	84-15-1	94	%	70-135	08.12.2020 09:03	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-23**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-092

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.12.2020 00:49	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.12.2020 00:49	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.12.2020 00:49	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.12.2020 00:49	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.12.2020 00:49	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.12.2020 00:49	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.12.2020 00:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.12.2020 00:49		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.12.2020 00:49		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-24**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-093

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	354	10.0	mg/kg	08.11.2020 20:03		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 09:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 09:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 09:24	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 09:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.12.2020 09:24	
o-Terphenyl	84-15-1	93	%	70-135	08.12.2020 09:24	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-24**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-093

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.12.2020 01:12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.12.2020 01:12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.12.2020 01:12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.12.2020 01:12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.12.2020 01:12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.12.2020 01:12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.12.2020 01:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.12.2020 01:12		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.12.2020 01:12		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-25**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-094

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	339	10.0	mg/kg	08.11.2020 20:09		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 09:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 09:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 09:44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 09:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.12.2020 09:44	
o-Terphenyl	84-15-1	92	%	70-135	08.12.2020 09:44	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-25**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-094

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.12.2020 01:34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.12.2020 01:34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.12.2020 01:34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.12.2020 01:34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.12.2020 01:34	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.12.2020 01:34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.12.2020 01:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	90	%	70-130	08.12.2020 01:34		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.12.2020 01:34		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-26**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-095

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1400	50.1	mg/kg	08.11.2020 20:14		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 10:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 10:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 10:04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 10:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	08.12.2020 10:04	
o-Terphenyl	84-15-1	89	%	70-135	08.12.2020 10:04	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-26**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-095

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.12.2020 01:57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.12.2020 01:57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.12.2020 01:57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.12.2020 01:57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.12.2020 01:57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.12.2020 01:57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.12.2020 01:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.12.2020 01:57		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.12.2020 01:57		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-27**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-096

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1090	49.7	mg/kg	08.11.2020 20:20		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 10:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 10:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 10:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 10:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	08.12.2020 10:25	
o-Terphenyl	84-15-1	90	%	70-135	08.12.2020 10:25	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-27**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-096

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 02:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 02:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 02:19	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.12.2020 02:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 02:19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 02:19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 02:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.12.2020 02:19		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.12.2020 02:19		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-28**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-097

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 10:10

Basis: Wet Weight

Seq Number: 3134247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	994	49.9	mg/kg	08.11.2020 20:26		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 10:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 10:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 10:45	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 10:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.12.2020 10:45	
o-Terphenyl	84-15-1	90	%	70-135	08.12.2020 10:45	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-28**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-097

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:56

Basis: Wet Weight

Seq Number: 3134358

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 02:42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 02:42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 02:42	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.12.2020 02:42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 02:42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 02:42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 02:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.12.2020 02:42		
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.12.2020 02:42		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-29**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-098

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	765	9.92	mg/kg	08.12.2020 04:53		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 11:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 11:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 11:05	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 11:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.12.2020 11:05	
o-Terphenyl	84-15-1	96	%	70-135	08.12.2020 11:05	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-29**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-098

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 15:58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 15:58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 15:58	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 15:58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 15:58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 15:58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 15:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 15:58		
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.11.2020 15:58		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-30**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-099

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	873	10.0	mg/kg	08.12.2020 05:10		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 11:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 11:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 11:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 11:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.12.2020 11:26	
o-Terphenyl	84-15-1	92	%	70-135	08.12.2020 11:26	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-30**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-099

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 16:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 16:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 16:19	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 16:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 16:19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 16:19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 16:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 16:19		
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.11.2020 16:19		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-31** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-100 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.11.2020 17:15 Basis: Wet Weight
 Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1150	50.0	mg/kg	08.12.2020 05:15		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:00 Basis: Wet Weight
 Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.12.2020 11:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.12.2020 11:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.12.2020 11:46	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.12.2020 11:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	08.12.2020 11:46	
o-Terphenyl	84-15-1	95	%	70-135	08.12.2020 11:46	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-31**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-100

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 16:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 16:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 16:39	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.11.2020 16:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 16:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 16:39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 16:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.11.2020 16:39		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 16:39		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-32**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-101

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1050	9.98	mg/kg	08.12.2020 05:21		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 12:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 12:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 12:26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 12:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.12.2020 12:26	
o-Terphenyl	84-15-1	98	%	70-135	08.12.2020 12:26	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-32**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-101

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 16:59	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 16:59	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 16:59	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 16:59	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 16:59	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 16:59	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 16:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.11.2020 16:59		
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.11.2020 16:59		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-33**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-102

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2260	49.4	mg/kg	08.12.2020 05:27		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.12.2020 12:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.12.2020 12:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.12.2020 12:47	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.12.2020 12:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	08.12.2020 12:47	
o-Terphenyl	84-15-1	102	%	70-135	08.12.2020 12:47	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-33**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-102

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 17:20	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 17:20	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 17:20	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 17:20	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 17:20	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 17:20	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 17:20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.11.2020 17:20		
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.11.2020 17:20		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-34**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-103

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1780	49.7	mg/kg	08.12.2020 05:43		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.12.2020 13:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.12.2020 13:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.12.2020 13:07	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.12.2020 13:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.12.2020 13:07	
o-Terphenyl	84-15-1	97	%	70-135	08.12.2020 13:07	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-34**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-103

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 17:40	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 17:40	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 17:40	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 17:40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 17:40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 17:40	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 17:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	08.11.2020 17:40		
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.11.2020 17:40		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-35**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-104

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1210	9.96	mg/kg	08.12.2020 05:49		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 13:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 13:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 13:27	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 13:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	08.12.2020 13:27	
o-Terphenyl	84-15-1	98	%	70-135	08.12.2020 13:27	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-35**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-104

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 18:01	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 18:01	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 18:01	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 18:01	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 18:01	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 18:01	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 18:01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.11.2020 18:01		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 18:01		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-36**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-105

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1190	50.5	mg/kg	08.12.2020 05:54		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.12.2020 13:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.12.2020 13:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.12.2020 13:47	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.12.2020 13:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	08.12.2020 13:47	
o-Terphenyl	84-15-1	98	%	70-135	08.12.2020 13:47	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-36**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-105

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 18:21	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 18:21	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 18:21	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	08.11.2020 18:21	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 18:21	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 18:21	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 18:21	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.11.2020 18:21		
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.11.2020 18:21		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-37**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-106

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1230	10.1	mg/kg	08.12.2020 06:00		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 14:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 14:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 14:08	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 14:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	08.12.2020 14:08	
o-Terphenyl	84-15-1	90	%	70-135	08.12.2020 14:08	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-37**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-106

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.11.2020 18:42	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.11.2020 18:42	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.11.2020 18:42	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.11.2020 18:42	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.11.2020 18:42	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.11.2020 18:42	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.11.2020 18:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 18:42		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 18:42		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-38**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-107

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1100	10.0	mg/kg	08.12.2020 06:06		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 14:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 14:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 14:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 14:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	08.12.2020 14:28	
o-Terphenyl	84-15-1	104	%	70-135	08.12.2020 14:28	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-38**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-107

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 19:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 19:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.11.2020 19:02		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 19:02		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-39**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-108

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	976	9.92	mg/kg	08.12.2020 06:11		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 14:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 14:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 14:48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 14:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	08.12.2020 14:48	
o-Terphenyl	84-15-1	98	%	70-135	08.12.2020 14:48	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-39**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-108

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 20:18	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 20:18	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 20:18	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.11.2020 20:18	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 20:18	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 20:18	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 20:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	85	%	70-130	08.11.2020 20:18		
4-Bromofluorobenzene	460-00-4	81	%	70-130	08.11.2020 20:18		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-40**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-109

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1150	49.9	mg/kg	08.12.2020 06:28		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 15:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 15:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 15:08	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 15:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	08.12.2020 15:08	
o-Terphenyl	84-15-1	98	%	70-135	08.12.2020 15:08	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-40**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-109

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 20:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 20:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 20:38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 20:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 20:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 20:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 20:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 20:38		
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.11.2020 20:38		



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-41**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-110

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	74.9	9.98	mg/kg	08.12.2020 06:34		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:00

Basis: Wet Weight

Seq Number: 3134349

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 15:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 15:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 15:28	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 15:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	08.12.2020 15:28	
o-Terphenyl	84-15-1	103	%	70-135	08.12.2020 15:28	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-41**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-110

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00192	0.00192	mg/kg	08.11.2020 20:59	U	1
Toluene	108-88-3	<0.00192	0.00192	mg/kg	08.11.2020 20:59	U	1
Ethylbenzene	100-41-4	<0.00192	0.00192	mg/kg	08.11.2020 20:59	U	1
m,p-Xylenes	179601-23-1	<0.00385	0.00385	mg/kg	08.11.2020 20:59	U	1
o-Xylene	95-47-6	<0.00192	0.00192	mg/kg	08.11.2020 20:59	U	1
Total Xylenes	1330-20-7	<0.00192	0.00192	mg/kg	08.11.2020 20:59	U	1
Total BTEX		<0.00192	0.00192	mg/kg	08.11.2020 20:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.11.2020 20:59	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.11.2020 20:59	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-42**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-111

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	52.4	10.0	mg/kg	08.12.2020 06:50		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.11.2020 22:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.11.2020 22:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.11.2020 22:15	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.11.2020 22:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	08.11.2020 22:15	
o-Terphenyl	84-15-1	108	%	70-135	08.11.2020 22:15	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-42**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-111

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 21:19	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 21:19	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 21:19	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 21:19	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 21:19	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 21:19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 21:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 21:19		
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.11.2020 21:19		



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-43**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-112

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	48.9	10.1	mg/kg	08.12.2020 06:56		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	08.11.2020 23:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	08.11.2020 23:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	08.11.2020 23:36	U	1
Total TPH	PHC635	<50.3	50.3	mg/kg	08.11.2020 23:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	08.11.2020 23:36	
o-Terphenyl	84-15-1	107	%	70-135	08.11.2020 23:36	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-43**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-112

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 21:40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 21:40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 21:40	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 21:40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 21:40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 21:40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 21:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	08.11.2020 21:40		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.11.2020 21:40		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-44**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-113

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.5	10.1	mg/kg	08.12.2020 07:02		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.11.2020 23:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.11.2020 23:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.11.2020 23:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.11.2020 23:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	08.11.2020 23:56	
o-Terphenyl	84-15-1	102	%	70-135	08.11.2020 23:56	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-44**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-113

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 13:47

Basis: Wet Weight

Seq Number: 3134242

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 22:00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 22:00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 22:00	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 22:00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 22:00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 22:00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 22:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.11.2020 22:00		
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.11.2020 22:00		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-45**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-114

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	08.12.2020 07:07	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 00:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 00:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 00:17	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 00:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.12.2020 00:17	
o-Terphenyl	84-15-1	107	%	70-135	08.12.2020 00:17	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-45**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-114

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.12.2020 08:14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.12.2020 08:14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.12.2020 08:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.12.2020 08:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.12.2020 08:14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.12.2020 08:14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.12.2020 08:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.12.2020 08:14		
1,4-Difluorobenzene	540-36-3	96	%	70-130	08.12.2020 08:14		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-46**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-115

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	08.12.2020 07:13	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 00:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 00:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 00:37	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 00:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.12.2020 00:37	
o-Terphenyl	84-15-1	109	%	70-135	08.12.2020 00:37	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-46**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-115

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 08:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 08:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 08:35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.12.2020 08:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 08:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 08:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 08:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.12.2020 08:35		
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.12.2020 08:35		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-47**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-116

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.88	9.88	mg/kg	08.12.2020 07:18	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 00:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 00:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 00:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 00:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	08.12.2020 00:57	
o-Terphenyl	84-15-1	109	%	70-135	08.12.2020 00:57	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-47**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-116

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.12.2020 08:55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.12.2020 08:55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.12.2020 08:55	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.12.2020 08:55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.12.2020 08:55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.12.2020 08:55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.12.2020 08:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.12.2020 08:55		
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.12.2020 08:55		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-48**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-117

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 17:15

Basis: Wet Weight

Seq Number: 3134252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	08.12.2020 07:24	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 01:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 01:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 01:17	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 01:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	08.12.2020 01:17	
o-Terphenyl	84-15-1	109	%	70-135	08.12.2020 01:17	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-48**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-117

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 09:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 09:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 09:16	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.12.2020 09:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 09:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 09:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 09:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.12.2020 09:16		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.12.2020 09:16		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-49**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-118

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 08:00

Basis: Wet Weight

Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	08.12.2020 09:10	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 01:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 01:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 01:37	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 01:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	08.12.2020 01:37	
o-Terphenyl	84-15-1	107	%	70-135	08.12.2020 01:37	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-49**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-118

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 02:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 02:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 02:54	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.12.2020 02:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 02:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 02:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 02:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	08.12.2020 02:54		
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.12.2020 02:54		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-50**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-119

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 08:00

Basis: Wet Weight

Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.1	9.96	mg/kg	08.12.2020 09:27		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 01:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 01:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 01:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 01:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	08.12.2020 01:58	
o-Terphenyl	84-15-1	106	%	70-135	08.12.2020 01:58	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-50**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-119

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 03:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 03:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 03:15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.12.2020 03:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 03:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 03:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 03:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.12.2020 03:15		
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.12.2020 03:15		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-51**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-120

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 08:00

Basis: Wet Weight

Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.8	9.98	mg/kg	08.12.2020 09:32		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 02:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 02:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 02:38	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 02:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.12.2020 02:38	
o-Terphenyl	84-15-1	107	%	70-135	08.12.2020 02:38	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-51**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-120

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 03:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 03:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 03:35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.12.2020 03:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 03:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 03:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 03:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.12.2020 03:35		
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.12.2020 03:35		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-52**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-121

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 08:00

Basis: Wet Weight

Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.2	9.92	mg/kg	08.12.2020 09:38		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 02:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 02:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 02:59	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 02:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.12.2020 02:59	
o-Terphenyl	84-15-1	106	%	70-135	08.12.2020 02:59	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-52**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-121

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.12.2020 03:56	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.12.2020 03:56	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.12.2020 03:56	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.12.2020 03:56	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.12.2020 03:56	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.12.2020 03:56	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.12.2020 03:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.12.2020 03:56		
1,4-Difluorobenzene	540-36-3	91	%	70-130	08.12.2020 03:56		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-53**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-122

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 08:00

Basis: Wet Weight

Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.4	9.98	mg/kg	08.12.2020 09:44		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:20

Basis: Wet Weight

Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 03:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 03:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 03:19	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 03:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	08.12.2020 03:19	
o-Terphenyl	84-15-1	111	%	70-135	08.12.2020 03:19	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-53**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-122

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 04:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 04:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 04:16	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.12.2020 04:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 04:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 04:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 04:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.12.2020 04:16		
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.12.2020 04:16		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-54** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-123 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 08:00 Basis: Wet Weight
 Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.9	9.88	mg/kg	08.12.2020 10:00		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:20 Basis: Wet Weight
 Seq Number: 3134273

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 03:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 03:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 03:39	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 03:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	08.12.2020 03:39	
o-Terphenyl	84-15-1	108	%	70-135	08.12.2020 03:39	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-54**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-123

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.12.2020 04:36	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.12.2020 04:36	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.12.2020 04:36	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.12.2020 04:36	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.12.2020 04:36	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.12.2020 04:36	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.12.2020 04:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.12.2020 04:36		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.12.2020 04:36		



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-55**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-124

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 08:00

Basis: Wet Weight

Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.8	10.0	mg/kg	08.12.2020 10:06		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:30

Basis: Wet Weight

Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	08.12.2020 08:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	08.12.2020 08:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	08.12.2020 08:02	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	08.12.2020 08:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	08.12.2020 08:02	
o-Terphenyl	84-15-1	114	%	70-135	08.12.2020 08:02	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-55**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-124

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 04:57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 04:57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 04:57	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.12.2020 04:57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 04:57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 04:57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 04:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.12.2020 04:57		
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.12.2020 04:57		



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-56**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-125

Date Collected: 08.06.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 08:00

Basis: Wet Weight

Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.4	9.92	mg/kg	08.12.2020 10:11		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.11.2020 17:30

Basis: Wet Weight

Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.12.2020 09:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.12.2020 09:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.12.2020 09:03	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.12.2020 09:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.12.2020 09:03	
o-Terphenyl	84-15-1	117	%	70-135	08.12.2020 09:03	



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Sidewall-56**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-125

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.12.2020 05:17	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.12.2020 05:17	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.12.2020 05:17	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.12.2020 05:17	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.12.2020 05:17	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.12.2020 05:17	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.12.2020 05:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.12.2020 05:17		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.12.2020 05:17		



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-1** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-126 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 08:00 Basis: Wet Weight
 Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	523	10.0	mg/kg	08.12.2020 10:17		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:30 Basis: Wet Weight
 Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 09:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 09:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 09:24	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 09:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	08.12.2020 09:24	
o-Terphenyl	84-15-1	113	%	70-135	08.12.2020 09:24	



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-1**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-126

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 05:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 05:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 05:38	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.12.2020 05:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 05:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 05:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 05:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.12.2020 05:38		
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.12.2020 05:38		



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-2** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-127 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 08:00 Basis: Wet Weight
 Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	610	10.0	mg/kg	08.12.2020 10:23		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:30 Basis: Wet Weight
 Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.12.2020 09:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.12.2020 09:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.12.2020 09:44	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.12.2020 09:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.12.2020 09:44	
o-Terphenyl	84-15-1	113	%	70-135	08.12.2020 09:44	



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-2**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-127

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.12.2020 05:58	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.12.2020 05:58	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.12.2020 05:58	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.12.2020 05:58	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.12.2020 05:58	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.12.2020 05:58	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.12.2020 05:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.12.2020 05:58		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.12.2020 05:58		



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-3** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-128 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 08:00 Basis: Wet Weight
 Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2660	49.8	mg/kg	08.12.2020 12:03		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:30 Basis: Wet Weight
 Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 10:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 10:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 10:04	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 10:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.12.2020 10:04	
o-Terphenyl	84-15-1	112	%	70-135	08.12.2020 10:04	



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Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-3**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-128

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.12.2020 07:13	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.12.2020 07:13	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.12.2020 07:13	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.12.2020 07:13	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.12.2020 07:13	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.12.2020 07:13	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.12.2020 07:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.12.2020 07:13		
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.12.2020 07:13		



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-4** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-129 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 08:00 Basis: Wet Weight
 Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1850	49.9	mg/kg	08.12.2020 12:20		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:30 Basis: Wet Weight
 Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 10:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 10:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 10:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 10:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	08.12.2020 10:25	
o-Terphenyl	84-15-1	111	%	70-135	08.12.2020 10:25	



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-4**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-129

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 07:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 07:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 07:34	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.12.2020 07:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 07:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 07:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 07:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.12.2020 07:34		
1,4-Difluorobenzene	540-36-3	104	%	70-130	08.12.2020 07:34		



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-5** Matrix: Soil Date Received: 08.10.2020 12:15
 Lab Sample Id: 669624-130 Date Collected: 08.06.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 08.12.2020 08:00 Basis: Wet Weight
 Seq Number: 3134281

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.3	9.96	mg/kg	08.12.2020 10:51		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 08.11.2020 17:30 Basis: Wet Weight
 Seq Number: 3134308

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	08.12.2020 10:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	08.12.2020 10:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	08.12.2020 10:45	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	08.12.2020 10:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	08.12.2020 10:45	
o-Terphenyl	84-15-1	106	%	70-135	08.12.2020 10:45	



Certificate of Analytical Results 669624

Tetra Tech- Midland, Midland, TX

Heartthrob Riser #7

Sample Id: **Internal Sidewall-5**

Matrix: Soil

Date Received: 08.10.2020 12:15

Lab Sample Id: 669624-130

Date Collected: 08.06.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.11.2020 16:09

Basis: Wet Weight

Seq Number: 3134249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.12.2020 07:54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.12.2020 07:54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.12.2020 07:54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.12.2020 07:54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.12.2020 07:54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.12.2020 07:54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.12.2020 07:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.12.2020 07:54		
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.12.2020 07:54		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134099

Matrix: Solid

Prep Method: E300P

Date Prep: 08.10.2020

MB Sample Id: 7709130-1-BLK

LCS Sample Id: 7709130-1-BKS

LCSD Sample Id: 7709130-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	267	107	90-110	0	20	mg/kg	08.10.2020 22:26	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134118

Matrix: Solid

Prep Method: E300P

Date Prep: 08.10.2020

MB Sample Id: 7709154-1-BLK

LCS Sample Id: 7709154-1-BKS

LCSD Sample Id: 7709154-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	274	110	272	109	90-110	1	20	mg/kg	08.10.2020 16:17	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134120

Matrix: Solid

Prep Method: E300P

Date Prep: 08.10.2020

MB Sample Id: 7709157-1-BLK

LCS Sample Id: 7709157-1-BKS

LCSD Sample Id: 7709157-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	268	107	90-110	0	20	mg/kg	08.10.2020 19:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134247

Matrix: Solid

Prep Method: E300P

Date Prep: 08.11.2020

MB Sample Id: 7709232-1-BLK

LCS Sample Id: 7709232-1-BKS

LCSD Sample Id: 7709232-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	267	107	90-110	0	20	mg/kg	08.11.2020 17:44	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134246

Matrix: Solid

Prep Method: E300P

Date Prep: 08.11.2020

MB Sample Id: 7709231-1-BLK

LCS Sample Id: 7709231-1-BKS

LCSD Sample Id: 7709231-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	268	107	268	107	90-110	0	20	mg/kg	08.11.2020 14:39	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134252

Matrix: Solid

Prep Method: E300P

Date Prep: 08.11.2020

MB Sample Id: 7709233-1-BLK

LCS Sample Id: 7709233-1-BKS

LCSD Sample Id: 7709233-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	267	107	90-110	0	20	mg/kg	08.12.2020 04:42	

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

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

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

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



Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134281

Matrix: Solid

Prep Method: E300P

Date Prep: 08.12.2020

MB Sample Id: 7709234-1-BLK

LCS Sample Id: 7709234-1-BKS

LCSD Sample Id: 7709234-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	267	107	90-110	0	20	mg/kg	08.12.2020 08:59	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134099

Matrix: Soil

Prep Method: E300P

Date Prep: 08.10.2020

Parent Sample Id: 669624-041

MS Sample Id: 669624-041 S

MSD Sample Id: 669624-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4450	248	4710	105	4720	109	90-110	0	20	mg/kg	08.10.2020 22:43	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134099

Matrix: Soil

Prep Method: E300P

Date Prep: 08.10.2020

Parent Sample Id: 669624-048

MS Sample Id: 669624-048 S

MSD Sample Id: 669624-048 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5750	202	5940	94	5940	94	90-110	0	20	mg/kg	08.11.2020 00:01	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134118

Matrix: Soil

Prep Method: E300P

Date Prep: 08.10.2020

Parent Sample Id: 669624-001

MS Sample Id: 669624-001 S

MSD Sample Id: 669624-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.7	200	227	105	227	105	90-110	0	20	mg/kg	08.10.2020 16:34	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134118

Matrix: Soil

Prep Method: E300P

Date Prep: 08.10.2020

Parent Sample Id: 669624-011

MS Sample Id: 669624-011 S

MSD Sample Id: 669624-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7450	202	7640	94	7650	100	90-110	0	20	mg/kg	08.10.2020 17:53	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134120

Matrix: Soil

Prep Method: E300P

Date Prep: 08.10.2020

Parent Sample Id: 669624-021

MS Sample Id: 669624-021 S

MSD Sample Id: 669624-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1560	199	1760	101	1770	106	90-110	1	20	mg/kg	08.10.2020 19:39	

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

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

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

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



Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134120

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 669624-031

MS Sample Id: 669624-031 S

Date Prep: 08.10.2020

MSD Sample Id: 669624-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1860	200	2040	90	2070	106	90-110	1	20	mg/kg	08.10.2020 20:57	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134247

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 669624-078

MS Sample Id: 669624-078 S

Date Prep: 08.11.2020

MSD Sample Id: 669624-078 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	176	200	383	104	382	104	90-110	0	20	mg/kg	08.11.2020 18:01	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134247

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 669624-088

MS Sample Id: 669624-088 S

Date Prep: 08.11.2020

MSD Sample Id: 669624-088 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	29.1	199	236	104	235	103	90-110	0	20	mg/kg	08.11.2020 19:19	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134246

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 669624-058

MS Sample Id: 669624-058 S

Date Prep: 08.11.2020

MSD Sample Id: 669624-058 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.8	199	220	105	220	105	90-110	0	20	mg/kg	08.11.2020 14:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134246

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 669624-068

MS Sample Id: 669624-068 S

Date Prep: 08.11.2020

MSD Sample Id: 669624-068 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.96	199	212	107	212	107	90-110	0	20	mg/kg	08.11.2020 16:20	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134252

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 669624-098

MS Sample Id: 669624-098 S

Date Prep: 08.11.2020

MSD Sample Id: 669624-098 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	765	199	961	98	960	98	90-110	0	20	mg/kg	08.12.2020 04:59	

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

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

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

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



Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134252

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 669624-108

MS Sample Id: 669624-108 S

Date Prep: 08.11.2020

MSD Sample Id: 669624-108 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	976	200	1190	107	1160	92	90-110	3	20	mg/kg	08.12.2020 06:17	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134281

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 669624-128

MS Sample Id: 669624-128 S

Date Prep: 08.12.2020

MSD Sample Id: 669624-128 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2660	198	2860	101	2870	104	90-110	0	20	mg/kg	08.12.2020 12:09	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134281

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 669624-118

MS Sample Id: 669624-118 S

Date Prep: 08.12.2020

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<10.0	200	211	106	90-110	mg/kg	08.12.2020 09:16	
Chloride	<10.0	200	212	106	90-110	mg/kg	08.12.2020 09:21	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134114

Matrix: Solid

Prep Method: SW8015P

MB Sample Id: 7709147-1-BLK

LCS Sample Id: 7709147-1-BKS

Date Prep: 08.10.2020

LCSD Sample Id: 7709147-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	946	95	1030	103	70-135	9	35	mg/kg	08.10.2020 12:40	
Diesel Range Organics (DRO)	<50.0	1000	1040	104	1080	108	70-135	4	35	mg/kg	08.10.2020 12:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		118		125		70-135	%	08.10.2020 12:40
o-Terphenyl	103		113		110		70-135	%	08.10.2020 12:40

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134122

Matrix: Solid

Prep Method: SW8015P

MB Sample Id: 7709153-1-BLK

LCS Sample Id: 7709153-1-BKS

Date Prep: 08.10.2020

LCSD Sample Id: 7709153-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1070	107	1050	105	70-135	2	35	mg/kg	08.10.2020 12:40	
Diesel Range Organics (DRO)	<50.0	1000	1180	118	1140	114	70-135	3	35	mg/kg	08.10.2020 12:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		127		123		70-135	%	08.10.2020 12:40
o-Terphenyl	107		120		116		70-135	%	08.10.2020 12:40

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

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

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

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



Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134232

MB Sample Id: 7709170-1-BLK

Matrix: Solid

LCS Sample Id: 7709170-1-BKS

Prep Method: SW8015P

Date Prep: 08.10.2020

LCSD Sample Id: 7709170-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	978	98	986	99	70-135	1	35	mg/kg	08.11.2020 11:47	
Diesel Range Organics (DRO)	<50.0	1000	1060	106	1040	104	70-135	2	35	mg/kg	08.11.2020 11:47	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	101		121		120		70-135	%	08.11.2020 11:47			
o-Terphenyl	106		112		108		70-135	%	08.11.2020 11:47			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134266

MB Sample Id: 7709171-1-BLK

Matrix: Solid

LCS Sample Id: 7709171-1-BKS

Prep Method: SW8015P

Date Prep: 08.10.2020

LCSD Sample Id: 7709171-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1140	114	1130	113	70-135	1	35	mg/kg	08.11.2020 11:47	
Diesel Range Organics (DRO)	<50.0	1000	1190	119	1160	116	70-135	3	35	mg/kg	08.11.2020 11:47	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	127		133		134		70-135	%	08.11.2020 11:47			
o-Terphenyl	117		123		119		70-135	%	08.11.2020 11:47			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134250

MB Sample Id: 7709245-1-BLK

Matrix: Solid

LCS Sample Id: 7709245-1-BKS

Prep Method: SW8015P

Date Prep: 08.11.2020

LCSD Sample Id: 7709245-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	913	91	944	94	70-135	3	35	mg/kg	08.11.2020 21:35	
Diesel Range Organics (DRO)	<50.0	1000	956	96	985	99	70-135	3	35	mg/kg	08.11.2020 21:35	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	97		119		120		70-135	%	08.11.2020 21:35			
o-Terphenyl	100		109		109		70-135	%	08.11.2020 21:35			

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

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

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

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



Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134349

MB Sample Id: 7709238-1-BLK

Matrix: Solid

LCS Sample Id: 7709238-1-BKS

Prep Method: SW8015P

Date Prep: 08.11.2020

LCSD Sample Id: 7709238-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1020	102	1010	101	70-135	1	35	mg/kg	08.12.2020 07:21	
Diesel Range Organics (DRO)	<50.0	1000	1100	110	1080	108	70-135	2	35	mg/kg	08.12.2020 07:21	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	108		126		123		70-135	%	08.12.2020 07:21			
o-Terphenyl	110		116		112		70-135	%	08.12.2020 07:21			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134273

MB Sample Id: 7709262-1-BLK

Matrix: Solid

LCS Sample Id: 7709262-1-BKS

Prep Method: SW8015P

Date Prep: 08.11.2020

LCSD Sample Id: 7709262-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1040	104	1080	108	70-135	4	35	mg/kg	08.11.2020 21:35	
Diesel Range Organics (DRO)	<50.0	1000	1060	106	1100	110	70-135	4	35	mg/kg	08.11.2020 21:35	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	110		134		129		70-135	%	08.11.2020 21:35			
o-Terphenyl	107		117		119		70-135	%	08.11.2020 21:35			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134308

MB Sample Id: 7709269-1-BLK

Matrix: Solid

LCS Sample Id: 7709269-1-BKS

Prep Method: SW8015P

Date Prep: 08.11.2020

LCSD Sample Id: 7709269-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1020	102	1040	104	70-135	2	35	mg/kg	08.12.2020 07:21	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1080	108	70-135	3	35	mg/kg	08.12.2020 07:21	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	109		124		125		70-135	%	08.12.2020 07:21			
o-Terphenyl	106		115		116		70-135	%	08.12.2020 07:21			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134114

Matrix: Solid
MB Sample Id: 7709147-1-BLK

Prep Method: SW8015P

Date Prep: 08.10.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.10.2020 12:20	

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

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

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

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

**Tetra Tech- Midland**

Heartthrob Riser #7

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134122

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.10.2020

MB Sample Id: 7709153-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

08.10.2020 12:20

Flag**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3134232

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.10.2020

MB Sample Id: 7709170-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

08.11.2020 11:26

Flag**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3134266

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.10.2020

MB Sample Id: 7709171-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

08.11.2020 11:26

Flag**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3134250

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.11.2020

MB Sample Id: 7709245-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

08.11.2020 21:15

Flag**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3134349

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.11.2020

MB Sample Id: 7709238-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

08.12.2020 07:01

Flag**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3134273

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.11.2020

MB Sample Id: 7709262-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

**MB
Result**

<50.0

Units

mg/kg

**Analysis
Date**

08.11.2020 21:15

Flag

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

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

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

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



Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134308

Matrix: Solid

Prep Method: SW8015P

Date Prep: 08.11.2020

MB Sample Id: 7709269-1-BLK

Parameter

Motor Oil Range Hydrocarbons (MRO)

MB
Result

<50.0

Units

mg/kg

Analysis
Date

08.12.2020 07:01

Flag

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134114

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.10.2020

Parent Sample Id: 669624-001

MS Sample Id: 669624-001 S

MSD Sample Id: 669624-001 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

Parent
Result

<50.0

Spike
Amount

999

MS
Result

976

MS
%Rec

98

MSD
Result

956

MSD
%Rec

96

Limits

70-135

%RPD

2

RPD
Limit

35

Units

mg/kg

Analysis
Date

08.10.2020 15:49

Flag

Diesel Range Organics (DRO)

<50.0

999

1010

101

1010

101

70-135

0

35

mg/kg

08.10.2020 15:49

Surrogate

1-Chlorooctane

MS
%Rec

125

MS
FlagMSD
%Rec

122

MSD
Flag

Limits

70-135

Units

%

Analysis
Date

08.10.2020 15:49

o-Terphenyl

111

109

70-135

%

08.10.2020 15:49

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134122

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.10.2020

Parent Sample Id: 669620-001

MS Sample Id: 669620-001 S

MSD Sample Id: 669620-001 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

Parent
Result

<49.8

Spike
Amount

995

MS
Result

1020

MS
%Rec

103

MSD
Result

1010

MSD
%Rec

102

Limits

70-135

%RPD

1

RPD
Limit

35

Units

mg/kg

Analysis
Date

08.10.2020 15:49

Flag

Diesel Range Organics (DRO)

<49.8

995

1110

112

1090

110

70-135

2

35

mg/kg

08.10.2020 15:49

Surrogate

1-Chlorooctane

MS
%Rec

130

MS
FlagMSD
%Rec

128

MSD
Flag

Limits

70-135

Units

%

Analysis
Date

08.10.2020 15:49

o-Terphenyl

122

121

70-135

%

08.10.2020 15:49

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134232

Matrix: Soil

Prep Method: SW8015P

Date Prep: 08.10.2020

Parent Sample Id: 669624-031

MS Sample Id: 669624-031 S

MSD Sample Id: 669624-031 SD

Parameter

Gasoline Range Hydrocarbons (GRO)

Parent
Result

<50.1

Spike
Amount

1000

MS
Result

833

MS
%Rec

83

MSD
Result

859

MSD
%Rec

86

Limits

70-135

%RPD

3

RPD
Limit

35

Units

mg/kg

Analysis
Date

08.11.2020 12:48

Flag

Diesel Range Organics (DRO)

<50.1

1000

904

90

1060

106

70-135

16

35

mg/kg

08.11.2020 12:48

Surrogate

1-Chlorooctane

MS
%Rec

108

MS
FlagMSD
%Rec

120

MSD
Flag

Limits

70-135

Units

%

Analysis
Date

08.11.2020 12:48

o-Terphenyl

106

128

70-135

%

08.11.2020 12:48

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

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

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

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

Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134266

Parent Sample Id: 669624-051

Matrix: Soil

MS Sample Id: 669624-051 S

Prep Method: SW8015P

Date Prep: 08.10.2020

MSD Sample Id: 669624-051 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1080	108	1060	106	70-135	2	35	mg/kg	08.11.2020 12:48	
Diesel Range Organics (DRO)	<50.2	1000	1120	112	1080	108	70-135	4	35	mg/kg	08.11.2020 12:48	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	131		129		70-135	%	08.11.2020 12:48
o-Terphenyl	122		117		70-135	%	08.11.2020 12:48

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134250

Parent Sample Id: 669624-071

Matrix: Soil

MS Sample Id: 669624-071 S

Prep Method: SW8015P

Date Prep: 08.11.2020

MSD Sample Id: 669624-071 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	889	89	910	91	70-135	2	35	mg/kg	08.11.2020 22:35	
Diesel Range Organics (DRO)	<50.2	1000	934	93	944	95	70-135	1	35	mg/kg	08.11.2020 22:35	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		119		70-135	%	08.11.2020 22:35
o-Terphenyl	100		101		70-135	%	08.11.2020 22:35

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134349

Parent Sample Id: 669624-091

Matrix: Soil

MS Sample Id: 669624-091 S

Prep Method: SW8015P

Date Prep: 08.11.2020

MSD Sample Id: 669624-091 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	834	84	868	87	70-135	4	35	mg/kg	08.12.2020 08:23	
Diesel Range Organics (DRO)	<49.8	996	870	87	906	91	70-135	4	35	mg/kg	08.12.2020 08:23	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		114		70-135	%	08.12.2020 08:23
o-Terphenyl	101		105		70-135	%	08.12.2020 08:23

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

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

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

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

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Heartthrob Riser #7

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134273

Parent Sample Id: 669624-111

Matrix: Soil

MS Sample Id: 669624-111 S

Prep Method: SW8015P

Date Prep: 08.11.2020

MSD Sample Id: 669624-111 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1310	131	1160	116	70-135	12	35	mg/kg	08.11.2020 22:35	
Diesel Range Organics (DRO)	<50.2	1000	1340	134	1160	116	70-135	14	35	mg/kg	08.11.2020 22:35	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		132		70-135	%	08.11.2020 22:35
o-Terphenyl	109		126		70-135	%	08.11.2020 22:35

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134308

Parent Sample Id: 669624-124

Matrix: Soil

MS Sample Id: 669624-124 S

Prep Method: SW8015P

Date Prep: 08.11.2020

MSD Sample Id: 669624-124 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.2	1000	1010	101	1020	103	70-135	1	35	mg/kg	08.12.2020 08:23	
Diesel Range Organics (DRO)	<50.2	1000	1020	102	1050	106	70-135	3	35	mg/kg	08.12.2020 08:23	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	126		131		70-135	%	08.12.2020 08:23
o-Terphenyl	117		123		70-135	%	08.12.2020 08:23

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134117

MB Sample Id: 7709145-1-BLK

Matrix: Solid

LCS Sample Id: 7709145-1-BKS

Prep Method: SW5035A

Date Prep: 08.10.2020

LCSD Sample Id: 7709145-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.0954	95	70-130	9	35	mg/kg	08.10.2020 16:02	
Toluene	<0.00200	0.100	0.0983	98	0.0883	88	70-130	11	35	mg/kg	08.10.2020 16:02	
Ethylbenzene	<0.00200	0.100	0.103	103	0.0910	91	71-129	12	35	mg/kg	08.10.2020 16:02	
m,p-Xylenes	<0.00400	0.200	0.211	106	0.188	94	70-135	12	35	mg/kg	08.10.2020 16:02	
o-Xylene	<0.00200	0.100	0.104	104	0.0926	93	71-133	12	35	mg/kg	08.10.2020 16:02	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		98		100		70-130	%	08.10.2020 16:02
4-Bromofluorobenzene	101		100		99		70-130	%	08.10.2020 16:02

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

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

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

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



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Heartthrob Riser #7

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134096

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.10.2020

MB Sample Id: 7709129-1-BLK

LCS Sample Id: 7709129-1-BKS

LCSD Sample Id: 7709129-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0973	97	0.110	110	70-130	12	35	mg/kg	08.10.2020 16:08	
Toluene	<0.00200	0.100	0.0925	93	0.105	105	70-130	13	35	mg/kg	08.10.2020 16:08	
Ethylbenzene	<0.00200	0.100	0.0867	87	0.0982	98	71-129	12	35	mg/kg	08.10.2020 16:08	
m,p-Xylenes	<0.00400	0.200	0.177	89	0.200	100	70-135	12	35	mg/kg	08.10.2020 16:08	
o-Xylene	<0.00200	0.100	0.0862	86	0.0977	98	71-133	13	35	mg/kg	08.10.2020 16:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		99		70-130	%	08.10.2020 16:08
4-Bromofluorobenzene	95		98		104		70-130	%	08.10.2020 16:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134241

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.10.2020

MB Sample Id: 7709152-1-BLK

LCS Sample Id: 7709152-1-BKS

LCSD Sample Id: 7709152-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.108	108	0.111	111	70-130	3	35	mg/kg	08.11.2020 04:50	
Toluene	<0.00200	0.100	0.102	102	0.106	106	70-130	4	35	mg/kg	08.11.2020 04:50	
Ethylbenzene	<0.00200	0.100	0.0938	94	0.0974	97	71-129	4	35	mg/kg	08.11.2020 04:50	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.197	99	70-135	4	35	mg/kg	08.11.2020 04:50	
o-Xylene	<0.00200	0.100	0.0949	95	0.0979	98	71-133	3	35	mg/kg	08.11.2020 04:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		99		70-130	%	08.11.2020 04:50
4-Bromofluorobenzene	96		102		104		70-130	%	08.11.2020 04:50

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134240

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.10.2020

MB Sample Id: 7709149-1-BLK

LCS Sample Id: 7709149-1-BKS

LCSD Sample Id: 7709149-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.101	101	0.0978	98	70-130	3	35	mg/kg	08.11.2020 02:58	
Toluene	<0.00200	0.100	0.0938	94	0.0937	94	70-130	0	35	mg/kg	08.11.2020 02:58	
Ethylbenzene	<0.00200	0.100	0.0997	100	0.0947	95	71-129	5	35	mg/kg	08.11.2020 02:58	
m,p-Xylenes	<0.00400	0.200	0.200	100	0.194	97	70-135	3	35	mg/kg	08.11.2020 02:58	
o-Xylene	<0.00200	0.100	0.102	102	0.0968	97	71-133	5	35	mg/kg	08.11.2020 02:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		100		97		70-130	%	08.11.2020 02:58
4-Bromofluorobenzene	110		99		99		70-130	%	08.11.2020 02:58

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

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

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

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



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Heartthrob Riser #7

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134242

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.11.2020

MB Sample Id: 7709227-1-BLK

LCS Sample Id: 7709227-1-BKS

LCSD Sample Id: 7709227-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0991	99	0.0994	99	70-130	0	35	mg/kg	08.11.2020 13:54	
Toluene	<0.00200	0.100	0.0932	93	0.0944	94	70-130	1	35	mg/kg	08.11.2020 13:54	
Ethylbenzene	<0.00200	0.100	0.0983	98	0.0987	99	71-129	0	35	mg/kg	08.11.2020 13:54	
m,p-Xylenes	<0.00400	0.200	0.202	101	0.204	102	70-135	1	35	mg/kg	08.11.2020 13:54	
o-Xylene	<0.00200	0.100	0.0998	100	0.0983	98	71-133	2	35	mg/kg	08.11.2020 13:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		94		70-130	%	08.11.2020 13:54
4-Bromofluorobenzene	102		100		97		70-130	%	08.11.2020 13:54

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134249

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.11.2020

MB Sample Id: 7709230-1-BLK

LCS Sample Id: 7709230-1-BKS

LCSD Sample Id: 7709230-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0971	97	0.0940	94	70-130	3	35	mg/kg	08.12.2020 00:58	
Toluene	<0.00200	0.100	0.0897	90	0.0904	90	70-130	1	35	mg/kg	08.12.2020 00:58	
Ethylbenzene	<0.00200	0.100	0.0916	92	0.0949	95	71-129	4	35	mg/kg	08.12.2020 00:58	
m,p-Xylenes	<0.00400	0.200	0.186	93	0.189	95	70-135	2	35	mg/kg	08.12.2020 00:58	
o-Xylene	<0.00200	0.100	0.0940	94	0.0953	95	71-133	1	35	mg/kg	08.12.2020 00:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		97		70-130	%	08.12.2020 00:58
4-Bromofluorobenzene	107		99		100		70-130	%	08.12.2020 00:58

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134358

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.11.2020

MB Sample Id: 7709229-1-BLK

LCS Sample Id: 7709229-1-BKS

LCSD Sample Id: 7709229-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.109	109	0.109	109	70-130	0	35	mg/kg	08.11.2020 16:36	
Toluene	<0.00200	0.100	0.104	104	0.103	103	70-130	1	35	mg/kg	08.11.2020 16:36	
Ethylbenzene	<0.00200	0.100	0.0968	97	0.0968	97	71-129	0	35	mg/kg	08.11.2020 16:36	
m,p-Xylenes	<0.00400	0.200	0.197	99	0.197	99	70-135	0	35	mg/kg	08.11.2020 16:36	
o-Xylene	<0.00200	0.100	0.0972	97	0.0968	97	71-133	0	35	mg/kg	08.11.2020 16:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		99		99		70-130	%	08.11.2020 16:36
4-Bromofluorobenzene	97		105		103		70-130	%	08.11.2020 16:36

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

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

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

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



Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134117

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.10.2020

Parent Sample Id: 669624-001

MS Sample Id: 669624-001 S

MSD Sample Id: 669624-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.115	115	0.102	103	70-130	12	35	mg/kg	08.10.2020 16:43	
Toluene	<0.00199	0.0996	0.110	110	0.0962	97	70-130	13	35	mg/kg	08.10.2020 16:43	
Ethylbenzene	<0.00199	0.0996	0.113	113	0.0990	100	71-129	13	35	mg/kg	08.10.2020 16:43	
m,p-Xylenes	<0.00398	0.199	0.233	117	0.199	100	70-135	16	35	mg/kg	08.10.2020 16:43	
o-Xylene	<0.00199	0.0996	0.114	114	0.101	102	71-133	12	35	mg/kg	08.10.2020 16:43	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		99		70-130	%	08.10.2020 16:43
4-Bromofluorobenzene	102		100		70-130	%	08.10.2020 16:43

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134096

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.10.2020

Parent Sample Id: 669624-021

MS Sample Id: 669624-021 S

MSD Sample Id: 669624-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.121	121	0.108	108	70-130	11	35	mg/kg	08.10.2020 16:53	
Toluene	<0.00201	0.100	0.115	115	0.102	102	70-130	12	35	mg/kg	08.10.2020 16:53	
Ethylbenzene	<0.00201	0.100	0.107	107	0.0941	94	71-129	13	35	mg/kg	08.10.2020 16:53	
m,p-Xylenes	<0.00402	0.201	0.218	108	0.191	96	70-135	13	35	mg/kg	08.10.2020 16:53	
o-Xylene	<0.00201	0.100	0.106	106	0.0948	95	71-133	11	35	mg/kg	08.10.2020 16:53	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		70-130	%	08.10.2020 16:53
4-Bromofluorobenzene	104		103		70-130	%	08.10.2020 16:53

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134241

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.10.2020

Parent Sample Id: 669624-058

MS Sample Id: 669624-058 S

MSD Sample Id: 669624-058 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0976	98	0.105	105	70-130	7	35	mg/kg	08.11.2020 05:35	
Toluene	<0.00200	0.100	0.0926	93	0.0990	99	70-130	7	35	mg/kg	08.11.2020 05:35	
Ethylbenzene	<0.00200	0.100	0.0857	86	0.0908	91	71-129	6	35	mg/kg	08.11.2020 05:35	
m,p-Xylenes	<0.00401	0.200	0.172	86	0.182	91	70-135	6	35	mg/kg	08.11.2020 05:35	
o-Xylene	<0.00200	0.100	0.0848	85	0.0899	90	71-133	6	35	mg/kg	08.11.2020 05:35	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		99		70-130	%	08.11.2020 05:35
4-Bromofluorobenzene	104		108		70-130	%	08.11.2020 05:35

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

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

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

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



Tetra Tech- Midland Heartthrob Riser #7

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134240

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.10.2020

Parent Sample Id: 669624-038

MS Sample Id: 669624-038 S

MSD Sample Id: 669624-038 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0917	92	0.0905	91	70-130	1	35	mg/kg	08.11.2020 03:38	
Toluene	<0.00201	0.100	0.0868	87	0.0835	84	70-130	4	35	mg/kg	08.11.2020 03:38	
Ethylbenzene	<0.00201	0.100	0.0891	89	0.0854	85	71-129	4	35	mg/kg	08.11.2020 03:38	
m,p-Xylenes	<0.00402	0.201	0.181	90	0.174	87	70-135	4	35	mg/kg	08.11.2020 03:38	
o-Xylene	<0.00201	0.100	0.0909	91	0.0856	86	71-133	6	35	mg/kg	08.11.2020 03:38	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		95		70-130	%	08.11.2020 03:38
4-Bromofluorobenzene	101		100		70-130	%	08.11.2020 03:38

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134242

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.11.2020

Parent Sample Id: 669624-098

MS Sample Id: 669624-098 S

MSD Sample Id: 669624-098 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.104	103	0.0941	93	70-130	10	35	mg/kg	08.11.2020 14:35	
Toluene	<0.00201	0.101	0.101	100	0.0888	88	70-130	13	35	mg/kg	08.11.2020 14:35	
Ethylbenzene	<0.00201	0.101	0.103	102	0.0913	90	71-129	12	35	mg/kg	08.11.2020 14:35	
m,p-Xylenes	<0.00402	0.201	0.210	104	0.183	91	70-135	14	35	mg/kg	08.11.2020 14:35	
o-Xylene	<0.00201	0.101	0.105	104	0.0922	91	71-133	13	35	mg/kg	08.11.2020 14:35	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	08.11.2020 14:35
4-Bromofluorobenzene	100		98		70-130	%	08.11.2020 14:35

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134249

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.11.2020

Parent Sample Id: 669624-118

MS Sample Id: 669624-118 S

MSD Sample Id: 669624-118 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.101	101	0.0947	95	70-130	6	35	mg/kg	08.12.2020 01:39	
Toluene	<0.00201	0.100	0.0960	96	0.0897	90	70-130	7	35	mg/kg	08.12.2020 01:39	
Ethylbenzene	<0.00201	0.100	0.0984	98	0.0921	92	71-129	7	35	mg/kg	08.12.2020 01:39	
m,p-Xylenes	<0.00402	0.201	0.197	98	0.186	93	70-135	6	35	mg/kg	08.12.2020 01:39	
o-Xylene	<0.00201	0.100	0.0968	97	0.0921	92	71-133	5	35	mg/kg	08.12.2020 01:39	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		99		70-130	%	08.12.2020 01:39
4-Bromofluorobenzene	95		99		70-130	%	08.12.2020 01:39

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

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

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

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

Tetra Tech- Midland

Heartthrob Riser #7

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134358

Parent Sample Id: 669624-078

Matrix: Soil

MS Sample Id: 669624-078 S

Prep Method: SW5035A

Date Prep: 08.11.2020

MSD Sample Id: 669624-078 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0870	87	0.106	106	70-130	20	35	mg/kg	08.11.2020 17:21	
Toluene	<0.00199	0.0996	0.0804	81	0.0983	98	70-130	20	35	mg/kg	08.11.2020 17:21	
Ethylbenzene	<0.00199	0.0996	0.0708	71	0.0882	88	71-129	22	35	mg/kg	08.11.2020 17:21	
m,p-Xylenes	<0.00398	0.199	0.142	71	0.177	89	70-135	22	35	mg/kg	08.11.2020 17:21	
o-Xylene	<0.00199	0.0996	0.0715	72	0.0885	89	71-133	21	35	mg/kg	08.11.2020 17:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		70-130	%	08.11.2020 17:21
4-Bromofluorobenzene	107		105		70-130	%	08.11.2020 17:21

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

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

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

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

Analysis Request of Custody Record



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Client Name:

EOG

Site Manager:

Conner Moehring

Project Name:

Hearthrob Riser #7

Project Location:

Lea County, New Mexico

Project #:

212C-MD-02149

Invoice to:

EOG - Galan Kelley

Receiving Laboratory:

Xenco

Sampler Signature:

John Thurston

Comments:

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

SAMPLING

YEAR: 2020

DATE

TIME

WATER

SOIL

HCL

HNO₃

ICE

None

CONTAINERS

FILTERED (Y/N)

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

Hold

ANALYSIS REQUEST

(Circle or Specify Method No.)

Bottomhole-1 (4')
Bottomhole-2 (4')
Bottomhole-3 (4')
Bottomhole-4 (4.5')
Bottomhole-5 (4.5')
Bottomhole-6 (4.5')
Bottomhole-7 (4.5')
Bottomhole-8 (4.5')
Bottomhole-9 (4.5')
Bottomhole-10 (4.5')

8/6/2020
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Relinquished by:

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Received by:

Date:

Time:

LAB USE ONLY

REMARKS:

STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

3.8/3.6

☒ 72 hr

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

6669624

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: **EOG** Site Manager: **Conner Moehring**

Project Name: **Hearthrob Riser #7**

Project Location: **Lea County, New Mexico** Project #: **212C-MD-02149**

Invoice to: **EOG - Galan Kelley**

Receiving Laboratory: **Xenco** Sampler Signature: **John Thurston**

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)
		YEAR: 2020		WATER	SOIL	HCL	HNO ₃	ICE	None		
		DATE	TIME								

	Bottomhole-11 (4.5')	8/6/2020		X				X		1	N
	Bottomhole-12 (5')	8/6/2020		X				X		1	N
	Bottomhole-13 (5')	8/6/2020		X				X		1	N
	Bottomhole-14 (5')	8/6/2020		X				X		1	N
	Bottomhole-15 (5')	8/6/2020		X				X		1	N
	Bottomhole-16 (5')	8/6/2020		X				X		1	N
	Bottomhole-17 (6')	8/6/2020		X				X		1	N
	Bottomhole-18 (6')	8/6/2020		X				X		1	N
	Bottomhole-19 (6')	8/6/2020		X				X		1	N
	Bottomhole-20 (6')	8/6/2020		X				X		1	N

Relinquished by: *[Signature]* Date: *8/10/20* Time: *12:15*

Received by: *[Signature]* Date: *8/10/20* Time: *12:15*

Relinquished by: *[Signature]* Date: *8/10/20* Time: *12:15*

Received by: *[Signature]* Date: *8/10/20* Time: *12:15*

ANALYSIS REQUEST
(Circle or Specify Method No.)

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
TPH 8015R	
Hold	

LAB USE ONLY

REMARKS:

☐ STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Sample Temperature: *3.8/3.6*

ORIGINAL COPY

06091624

INDEX	UPS	Tracking #:

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559



Tetra Tech, Inc.

West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Page 4 of 13

20240926

[illegible]

Inquired by:		Date:		Time:		Received by:		Date:		Time:	

3.8/3.6

☐ Russian Charges Authorized

☐ Special Report Limits or TRRP Report

ORIGINAL COPY

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB USE ONLY

REMARKS:

STANDARD

Sample Temperature

☒ **HUSH:** Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Hold

Final 1,000

Analysis Request of Custody Record



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

6669624

Client Name: EOG Site Manager: Conner Moehring

Project Name: Hearthrob Riser #7

Project Location: Lea County, New Mexico Project #: 212C-MD-02149

Invoice to: EOG - Galan Kelley

Receiving Laboratory: Xenco Sampler Signature: John Thurston

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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	Bottomhole-41 (4.5')			8/6/2020		X				X			1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Relinquished by: *[Signature]* Date: 8/10/20 Time: 12:15 Received by: *[Signature]* Date: 8/10/20 Time: 12:15

Relinquished by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____

LAB USE ONLY

REMARKS:

☐ STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Sample Temperature: 3.8/3.6

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901 West Wall Street, Ste 100
 Midland, Texas 79701
 Tel (432) 682-4559
 Fax (432) 682-3946

Page 6 of 13

le 6/9/2024

Client Name:

EOG

Site Manager:

Conner Moehring

Project Name:

Hearthrob Riser #7

Project Location:

Lea County, New Mexico

Project #:

212C-MD-02149

Invoice to:

EOG - Galan Kelley

Receiving Laboratory:

Xenco

Sampler Signature:

John Thurston

Comments:

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

SAMPLING

YEAR: 2020

DATE
TIME

MATRIX

PRESERVATIVE METHOD

WATER
SOIL
HCL
HNO₃
ICE
None# CONTAINERS
FILTERED (Y/N)

Bottomhole-51 (4.5')	8/6/2020		X							1	N
Bottomhole-52 (4.5')	8/6/2020		X							1	N
Bottomhole-53 (4.5')	8/6/2020		X							1	N
Bottomhole-54 (4.5')	8/6/2020		X							1	N
Bottomhole-55 (4.5')	8/6/2020		X							1	N
Bottomhole-56 (4.5')	8/6/2020		X							1	N
Bottomhole-57 (4.5')	8/6/2020		X							1	N
Bottomhole-58 (4.5')	8/6/2020		X							1	N
Bottomhole-59 (4.5')	8/6/2020		X							1	N
Bottomhole-60 (1')	8/6/2020		X							1	N

Inquired by:

Date: 8/10/20

Time: 12:15

Received by:

Date: 8/10/20

Time: 12:15

Inquired by:

Date: 8/10/20

Time: 12:15

Received by:

Date: 8/10/20

Time: 12:15

Inquired by:

Date: 8/10/20

Time: 12:15

Received by:

Date: 8/10/20

Time: 12:15

ANALYSIS REQUEST

(Circle or Specify Method No.)

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
TPH 8015R	
Hold	

LAB USE ONLY

REMARKS:

STANDARD

Sample Temperature

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED

FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

06091624

Client Name: EOG		Site Manager: Conner Moehring	
Project Name: Hearthrob Riser #7			
Project Location: Lea County, New Mexico		Project #: 212C-MD-02149	
Invoice to: EOG - Galan Kelley			
Receiving Laboratory: Xenco		Sampler Signature: John Thurston	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None					
										YEAR: 2020				
	Bottomhole-61 (1')	8/6/2020		X				X				1	N	BTEX 8021B BTEX 8260B
	Bottomhole-62 (1')	8/6/2020		X				X				1	N	TPH TX1005 (Ext to C35)
	Bottomhole-63 (1')	8/6/2020		X				X				1	N	TPH 8015M (GRO - DRO - ORO - MRO)
	Bottomhole-64 (1')	8/6/2020		X				X				1	N	PAH 8270C
	Bottomhole-65 (1')	8/6/2020		X				X				1	N	Total Metals Ag As Ba Cd Cr Pb Se Hg
	Bottomhole-66 (1')	8/6/2020		X				X				1	N	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	Bottomhole-67 (1')	8/6/2020		X				X				1	N	TCLP Volatiles
	Bottomhole-68 (1')	8/6/2020		X				X				1	N	TCLP Semi Volatiles
	Bottomhole-69 (1')	8/6/2020		X				X				1	N	RCI
	Sidewall - 1	8/6/2020		X				X				1	N	GC/MS Vol. 8260B / 624
														GC/MS Semi. Vol. 8270C/625
														PCB's 8082 / 608
														NORM
														PLM (Asbestos)
														Chloride
														Chloride Sulfate TDS
														General Water Chemistry (see attached list)
														Anion/Cation Balance
														TPH 8015R
														Hold

Inquired by: <i>[Signature]</i> Date: 8/10/20 Time: 12:15 Received by: <i>[Signature]</i> Date: 8/10/20 Time: 12:15 Inquired by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____	REMARKS: ☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report
--	--

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

3.8/3.6

Sample Temperature

LAB USE ONLY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Page 8 of 13

10109024

Client Name: EOG		Site Manager: Conner Moehring	
Project Name: Hearthrob Riser #7			
Project Location: Lea County, New Mexico		Project #: 212C-MD-02149	
Invoice to: EOG - Galan Kelley			
Receiving Laboratory: Xenco		Sampler Signature: John Thurston	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None				
										YEAR: 2020			
	Sidewall-2	8/6/2020		X				X				1	N
	Sidewall-3	8/6/2020		X				X				1	N
	Sidewall-4	8/6/2020		X				X				1	N
	Sidewall-5	8/6/2020		X				X				1	N
	Sidewall-6	8/6/2020		X				X				1	N
	Sidewall-7	8/6/2020		X				X				1	N
	Sidewall-8	8/6/2020		X				X				1	N
	Sidewall-9	8/6/2020		X				X				1	N
	Sidewall-10	8/6/2020		X				X				1	N
	Sidewall-11	8/6/2020		X				X				1	N

LAB USE ONLY	REMARKS:	STANDARD	
		STANDARD	STANDARD
38/3.6	Sample Temperature		
	☒ RUSH: Same Day 24 hr 48 hr 72 hr		
	☐ Rush Charges Authorized		
	☐ Special Report Limits or TRRP Report		

ANALYSIS REQUEST (Circle or Specify Method No.)	
BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
TPH 8015R	
Hold	

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Page 9 of 13

Client Name:

EOG

Site Manager:

Conner Moehring

Project Name:

Hearthrob Riser #7

Project Location:
(county, state)

Lea County, New Mexico

Project #:

212C-MD-02149

Invoice to:

EOG - Galan Kelley

Receiving Laboratory:

Xenco

Sampler Signature:

John Thurston

Comments:

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

YEAR 2020	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None	# CONTAINERS	FILTERED (Y/N)
	Sidewall-12	8/6/2020		X			X		1	N
	Sidewall-13	8/6/2020		X			X		1	N
	Sidewall-14	8/6/2020		X			X		1	N
	Sidewall-15	8/6/2020		X			X		1	N
	Sidewall-16	8/6/2020		X			X		1	N
	Sidewall-17	8/6/2020		X			X		1	N
	Sidewall-18	8/6/2020		X			X		1	N
	Sidewall-19	8/6/2020		X			X		1	N
	Sidewall-20	8/6/2020		X			X		1	N
	Sidewall-21	8/6/2020		X			X		1	N

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
TPH 8015R	
Hold	

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB USE ONLY

8/16/20 12:15

Received by:

8/16/20 12:15

LAB USE ONLY

REMARKS:
☐ STANDARD
☒ RUSH: Same Day 24 hr 48 hr 12 hr

Inquired by:

Date: Time:

Received by:

Date: Time:

3.8/3.6

Special Report Limits or TRRP Report

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Client Name:

EOG

Site Manager:

Conner Moehring

Project Name:

Hearthrob Riser #7

Project Location:

Lea County, New Mexico

Project #:

212C-MD-02149

Invoice to:

EOG - Galan Kelley

Receiving Laboratory:

Xenco

Sampler Signature:

John Thurston

Comments:

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None	# CONTAINERS	FILTERED (Y/N)
Sidewall-22	8/6/2020		X				X		1	N
Sidewall-23	8/6/2020		X				X		1	N
Sidewall-24	8/6/2020		X				X		1	N
Sidewall-25	8/6/2020		X				X		1	N
Sidewall-26	8/6/2020		X				X		1	N
Sidewall-27	8/6/2020		X				X		1	N
Sidewall-28	8/6/2020		X				X		1	N
Sidewall-29	8/6/2020		X				X		1	N
Sidewall-30	8/6/2020		X				X		1	N
Sidewall-31	8/6/2020		X				X		1	N

Relinquished by: *[Signature]* Date: 8/10/20 Time: 12:15
Received by: *[Signature]* Date: 8/10/20 Time: 12:15

Relinquished by: Date: Time: Received by: Date: Time:

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance
- TPH 8015R

Hold

LAB USE ONLY

REMARKS:

☐ STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Sample Temperature

3.8/3.6

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

060624

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901 West Wall Street, Ste 100
 Midland, Texas 79701
 Tel (432) 682-4559
 Fax (432) 682-3946

Page 11 of 13

le69624

Client Name: EOG		Site Manager: Conner Moehring	
Project Name: Heartthrob Riser #7		Project #: 212C-MD-02149	
Project Location: Lea County, New Mexico		Project #:	
Invoice to: EOG - Galan Kelley		Sampler Signature: John Thurston	
Receiving Laboratory: Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None					
										YEAR: 2020				
	Sidewall-32	8/6/2020		X				X				1	N	BTX 8021B BTX 8260B
	Sidewall-33	8/6/2020		X				X				1	N	TPH TX1005 (Ext to C35)
	Sidewall-34	8/6/2020		X				X				1	N	TPH 8015M (GRO - DRO - ORO - MRO)
	Sidewall-35	8/6/2020		X				X				1	N	PAH 8270C
	Sidewall-36	8/6/2020		X				X				1	N	Total Metals Ag As Ba Cd Cr Pb Se Hg
	Sidewall-37	8/6/2020		X				X				1	N	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	Sidewall-38	8/6/2020		X				X				1	N	TCLP Volatiles
	Sidewall-39	8/6/2020		X				X				1	N	TCLP Semi Volatiles
	Sidewall-40	8/6/2020		X				X				1	N	RCI
	Sidewall-41	8/6/2020		X				X				1	N	GC/MS Vol. 8260B / 624
														GC/MS Semi. Vol. 8270C/625
														PCB's 8082 / 608
														NORM
														PLM (Asbestos)
														Chloride
														Chloride Sulfate TDS
														General Water Chemistry (see attached list)
														Anion/Cation Balance
														TPH 8015R
														Hold

Requisitioned by: <i>[Signature]</i>	Date: 8/10/20	Time: 12:15	Received by: <i>[Signature]</i>	Date: 8/10/20	Time: 12:15
Requisitioned by:	Date:	Time:	Received by:	Date:	Time:

Requisitioned by:	Date:	Time:	Received by:	Date:	Time:
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LAB USE ONLY	REMARKS:
☐ STANDARD ☒ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report	Sample Temperature: 38/3.6 (Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY



Tetra Tech, Inc.

Client Name: EOG		Site Manager: Conner Moehring	
Project Name: Heartthrob Riser #7			
Project Location: Lea County, New Mexico		Project #: 212C-MD-02149	
Invoice to: EOG - Galan Kelley			
Receiving Laboratory: Xenco		Sampler Signature: John Thurston	
Comments:			
LAB # (LAB USE ONLY)		SAMPLE IDENTIFICATION	
		SAMPLING	
		YEAR: 2020	
		DATE	
		TIME	
		WATER	
		SOIL	
		HCL	
		HNO3	
		ICE	
		None	
		# CONTAINERS	
		FILTERED (Y/N)	
		BTEX 8021B BTEX 8260B	
		TPH TX1005 (Ext to C35)	
		TPH 8015M (GRO - DRO - ORO - MRO)	
		PAH 8270C	
		Total Metals Ag As Ba Cd Cr Pb Se Hg	
		TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
		TCLP Volatiles	
		TCLP Semi Volatiles	
		RCI	
		GC/MS Vol. 8260B / 624	
		GC/MS Semi. Vol. 8270C/625	
		PCB's 8082 / 608	
		NORM	
		PLM (Asbestos)	
		Chloride	
		Chloride Sulfate TDS	
		General Water Chemistry (see attached list)	
		Anion/Cation Balance	
		TPH 8015R	
		Hold	
LAB USE ONLY		REMARKS:	
STANDARD			
RUSH: Same Day 24 hr 48 hr 72 hr			
Rush Charges Authorized			
Special Report Limits or TRRP Report			

ORIGINAL COPY

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB USE ONLY

REMARKS:

STANDARD

Sample Temperature

☒ **RUSH:** Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Social Report Limits or TRAP Report

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Hold

Final 1,000

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: EOG		Site Manager: Conner Moehring								
Project Name: Heartthrob Riser #7										
Project Location: Lea County, New Mexico		Project #: 212C-MD-02149								
Invoice to: EOG - Galan Kelley										
Receiving Laboratory: Xenco		Sampler Signature: John Thurston								
Comments:										
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)		
		YEAR: 2020	DATE						TIME	WATER
	Sidewall-52	8/6/2020			X		1	N	X	BTEX 8021B BTEX 8260B
	Sidewall-53	8/6/2020			X		1	N	X	TPH TX1005 (Ext to C35)
	Sidewall-54	8/6/2020			X		1	N	X	TPH 8015M (GRO - DRO - ORO - MRO)
	Sidewall-55	8/6/2020			X		1	N	X	PAH 8270C
	Sidewall-56	8/6/2020			X		1	N	X	Total Metals Ag As Ba Cd Cr Pb Se Hg
	Internal Sidewall-1	8/6/2020			X		1	N	X	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	Internal Sidewall-2	8/6/2020			X		1	N	X	TCLP Volatiles
	Internal Sidewall-3	8/6/2020			X		1	N	X	TCLP Semi Volatiles
	Internal Sidewall-4	8/6/2020			X		1	N	X	RCI
	Internal Sidewall-5	8/6/2020			X		1	N	X	GC/MS Vol. 8260B / 624
										GC/MS Semi. Vol. 8270C/625
										PCB's 8082 / 608
										NORM
										PLM (Asbestos)
										Chloride
										Chloride Sulfate TDS
										General Water Chemistry (see attached list)
										Anion/Cation Balance
										TPH 8015R
										Hold
Inquired by: [Signature]		Date: 8/10/20	Time: 12:15	Received by: [Signature]		Date: 8/10/20	Time: 12:15	REMARKS:		
Inquired by:		Date:	Time:	Received by:		Date:	Time:	LAB USE ONLY		
Inquired by:		Date:	Time:	Received by:		Date:	Time:	STANDARD		
Inquired by:		Date:	Time:	Received by:		Date:	Time:	RUSH: Same Day 24 hr 48 hr 72 hr		
Inquired by:		Date:	Time:	Received by:		Date:	Time:	Rush Charges Authorized		
Inquired by:		Date:	Time:	Received by:		Date:	Time:	Special Report Limits or TRRP Report		

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(Circle) HAND DELIVERED

FEDEX UPS Tracking #:

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland**Date/ Time Received:** 08.10.2020 12.15.00 PM**Work Order #:** 669624**Acceptable Temperature Range:** 0 - 6 degC**Air and Metal samples Acceptable Range:** Ambient**Temperature Measuring device used :** T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Elizabeth McClellan

Date: 08.10.2020

Checklist reviewed by:

Jessica Kramer

Date: 08.10.2020

Certificate of Analysis Summary 670276



Tetra Tech- Midland, Midland, TX

Project Name: Heart Throb to Riser No. 7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea Co, NM

Date Received in Lab: Tue 08.18.2020 12:30
Report Date: 08.20.2020 17:11
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	670276-001	670276-002	670276-003	670276-004	670276-005	670276-006
	<i>Field Id:</i>	Sidewall 26	Sidewall 27	Sidewall 28	Sidewall 29	Sidewall 30	Sidewall 31
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.17.2020 00:00	08.17.2020 00:00	08.17.2020 00:00	08.17.2020 00:00	08.17.2020 00:00	08.17.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.18.2020 12:45	08.18.2020 12:45	08.18.2020 12:45	08.18.2020 12:45	08.18.2020 12:45	08.18.2020 12:45
	<i>Analyzed:</i>	08.18.2020 16:31	08.18.2020 16:51	08.18.2020 18:15	08.18.2020 18:35	08.18.2020 18:55	08.18.2020 19:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00198 0.00198	<0.00199 0.00199	0.0108 0.00200	0.00939 0.00198	0.0108 0.00200	0.0100 0.00200
Ethylbenzene		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00397 0.00397	<0.00398 0.00398	<0.00399 0.00399	<0.00397 0.00397	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00198 0.00198	<0.00199 0.00199	0.0108 0.00200	0.00939 0.00198	0.0108 0.00200	0.0100 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.18.2020 14:50	08.18.2020 14:50	08.18.2020 14:50	08.18.2020 14:50	08.18.2020 14:50	08.18.2020 14:50
	<i>Analyzed:</i>	08.18.2020 16:51	08.18.2020 17:35	08.18.2020 17:41	08.18.2020 17:47	08.18.2020 17:54	08.18.2020 18:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		95.8 4.99	64.3 5.02	78.0 5.00	65.8 5.04	61.9 4.95	138 4.95
TPH By SW8015 Mod	<i>Extracted:</i>	08.19.2020 11:00	08.19.2020 11:00	08.19.2020 11:00	08.19.2020 11:00	08.19.2020 11:00	08.19.2020 11:00
	<i>Analyzed:</i>	08.19.2020 13:17	08.19.2020 14:22	08.19.2020 14:43	08.19.2020 15:05	08.19.2020 15:27	08.19.2020 15:48
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 670276



Tetra Tech- Midland, Midland, TX

Project Name: Heart Throb to Riser No. 7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea Co, NM

Date Received in Lab: Tue 08.18.2020 12:30**Report Date:** 08.20.2020 17:11**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	670276-007	670276-008	670276-009	670276-010	670276-011	670276-012
	<i>Field Id:</i>	Sidewall 32	Sidewall 33	Sidewall 34	Sidewall 35 (6")	Sidewall 36 (6")	Sidewall 37 (6")
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.17.2020 00:00	08.17.2020 00:00	08.17.2020 00:00	08.17.2020 00:00	08.17.2020 00:00	08.17.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.18.2020 12:45	08.18.2020 12:45	08.18.2020 12:45	08.18.2020 12:45	08.18.2020 12:45	08.19.2020 08:45
	<i>Analyzed:</i>	08.18.2020 19:36	08.18.2020 19:57	08.18.2020 20:17	08.18.2020 20:37	08.18.2020 20:58	08.19.2020 12:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199
Toluene		0.00893 0.00199	0.0101 0.00199	0.0109 0.00198	0.0110 0.00201	0.0116 0.00201	0.00482 X 0.00199
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00396 0.00396	<0.00402 0.00402	<0.00402 0.00402	<0.00398 0.00398
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199
Total BTEX		0.00893 0.00199	0.0101 0.00199	0.0109 0.00198	0.0110 0.00201	0.0116 0.00201	0.00482 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	08.18.2020 14:50	08.18.2020 14:50	08.18.2020 17:00	08.18.2020 17:00	08.18.2020 17:00	08.18.2020 17:00
	<i>Analyzed:</i>	08.18.2020 18:06	08.18.2020 18:13	08.18.2020 18:50	08.18.2020 19:09	08.18.2020 19:15	08.18.2020 19:22
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		57.4 5.02	69.8 4.96	90.3 4.95	16.3 4.99	14.9 5.03	54.2 4.97
TPH By SW8015 Mod	<i>Extracted:</i>	08.19.2020 11:00	08.19.2020 11:00	08.19.2020 11:00	08.19.2020 11:00	08.19.2020 11:00	08.19.2020 11:00
	<i>Analyzed:</i>	08.19.2020 16:10	08.19.2020 16:33	08.19.2020 16:54	08.19.2020 17:16	08.19.2020 17:59	08.19.2020 18:21
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 670276



Tetra Tech- Midland, Midland, TX

Project Name: Heart Throb to Riser No. 7

Project Id: 212C-MD-02149
Contact: Conner Moehring
Project Location: Lea Co, NM

Date Received in Lab: Tue 08.18.2020 12:30
Report Date: 08.20.2020 17:11
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	670276-013	670276-014	670276-015			
	Field Id:	Sidewall 38 (6")	Sidewall 39 (6")	Sidewall 40 (6")			
	Depth:						
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	08.17.2020 00:00	08.17.2020 00:00	08.17.2020 00:00			
BTEX by EPA 8021B	Extracted:	08.19.2020 08:45	08.19.2020 08:45	08.19.2020 08:45			
	Analyzed:	08.19.2020 12:48	08.19.2020 13:08	08.19.2020 13:29			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200			
Toluene		0.00563 0.00199	0.00540 0.00201	0.00555 0.00200			
Ethylbenzene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200			
m,p-Xylenes		<0.00398 0.00398	<0.00402 0.00402	<0.00399 0.00399			
o-Xylene		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200			
Total Xylenes		<0.00199 0.00199	<0.00201 0.00201	<0.00200 0.00200			
Total BTEX		0.00563 0.00199	0.00540 0.00201	0.00555 0.00200			
Inorganic Anions by EPA 300/300.1	Extracted:	08.18.2020 17:00	08.18.2020 17:00	08.18.2020 17:00			
	Analyzed:	08.18.2020 19:28	08.18.2020 19:47	08.18.2020 19:53			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		58.1 5.00	53.9 5.00	15.8 5.03			
TPH By SW8015 Mod	Extracted:	08.19.2020 11:00	08.19.2020 11:00	08.19.2020 11:00			
	Analyzed:	08.19.2020 18:42	08.19.2020 19:04	08.19.2020 19:26			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8			
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8			
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8			
Total TPH		<50.0 50.0	<49.9 49.9	<49.8 49.8			

BRL - Below Reporting Limit

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

Analytical Report 670276

for

Tetra Tech- Midland

Project Manager: Conner Moehring

Heart Throb to Riser No. 7

212C-MD-02149

08.20.2020

Collected By: Client



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

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

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

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



08.20.2020

Project Manager: **Conner Moehring**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **670276**

Heart Throb to Riser No. 7

Project Address: Lea Co, NM

Conner Moehring:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 670276. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 670276 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 670276****Tetra Tech- Midland, Midland, TX**

Heart Throb to Riser No. 7

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Sidewall 26	S	08.17.2020 00:00		670276-001
Sidewall 27	S	08.17.2020 00:00		670276-002
Sidewall 28	S	08.17.2020 00:00		670276-003
Sidewall 29	S	08.17.2020 00:00		670276-004
Sidewall 30	S	08.17.2020 00:00		670276-005
Sidewall 31	S	08.17.2020 00:00		670276-006
Sidewall 32	S	08.17.2020 00:00		670276-007
Sidewall 33	S	08.17.2020 00:00		670276-008
Sidewall 34	S	08.17.2020 00:00		670276-009
Sidewall 35 (6")	S	08.17.2020 00:00		670276-010
Sidewall 36 (6")	S	08.17.2020 00:00		670276-011
Sidewall 37 (6")	S	08.17.2020 00:00		670276-012
Sidewall 38 (6")	S	08.17.2020 00:00		670276-013
Sidewall 39 (6")	S	08.17.2020 00:00		670276-014
Sidewall 40 (6")	S	08.17.2020 00:00		670276-015

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Heart Throb to Riser No. 7**

Project ID: 212C-MD-02149
Work Order Number(s): 670276

Report Date: 08.20.2020
Date Received: 08.18.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3134977 BTEX by EPA 8021B

Lab Sample ID 670276-012 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). m,p-Xylenes recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Benzene, Ethylbenzene, Toluene, o-Xylene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 670276-012, -013, -014, -015. The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 26**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-001

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 14:50

Basis: Wet Weight

Seq Number: 3134906

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	95.8	4.99	mg/kg	08.18.2020 16:51		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.19.2020 13:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.19.2020 13:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.19.2020 13:17	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.19.2020 13:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	08.19.2020 13:17	
o-Terphenyl	84-15-1	115	%	70-130	08.19.2020 13:17	



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 26**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-001

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.18.2020 16:31	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.18.2020 16:31	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.18.2020 16:31	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.18.2020 16:31	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.18.2020 16:31	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.18.2020 16:31	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.18.2020 16:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.18.2020 16:31		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.18.2020 16:31		



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 27**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-002

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 14:50

Basis: Wet Weight

Seq Number: 3134906

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	64.3	5.02	mg/kg	08.18.2020 17:35		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.19.2020 14:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.19.2020 14:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.19.2020 14:22	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.19.2020 14:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	08.19.2020 14:22	
o-Terphenyl	84-15-1	91	%	70-130	08.19.2020 14:22	



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 27**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-002

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.18.2020 16:51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.18.2020 16:51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.18.2020 16:51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.18.2020 16:51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.18.2020 16:51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.18.2020 16:51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.18.2020 16:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.18.2020 16:51		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.18.2020 16:51		



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 28**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-003

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 14:50

Basis: Wet Weight

Seq Number: 3134906

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	78.0	5.00	mg/kg	08.18.2020 17:41		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.19.2020 14:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.19.2020 14:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.19.2020 14:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.19.2020 14:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	08.19.2020 14:43	
o-Terphenyl	84-15-1	101	%	70-130	08.19.2020 14:43	



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 28**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-003

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.2020 18:15	U	1
Toluene	108-88-3	0.0108	0.00200	mg/kg	08.18.2020 18:15		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.18.2020 18:15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.18.2020 18:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.18.2020 18:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.18.2020 18:15	U	1
Total BTEX		0.0108	0.00200	mg/kg	08.18.2020 18:15		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.18.2020 18:15		
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.18.2020 18:15		



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 29**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-004

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 14:50

Basis: Wet Weight

Seq Number: 3134906

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	65.8	5.04	mg/kg	08.18.2020 17:47		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.19.2020 15:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.19.2020 15:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.19.2020 15:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.19.2020 15:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	08.19.2020 15:05	
o-Terphenyl	84-15-1	99	%	70-130	08.19.2020 15:05	



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 29**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-004

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.18.2020 18:35	U	1
Toluene	108-88-3	0.00939	0.00198	mg/kg	08.18.2020 18:35		1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.18.2020 18:35	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.18.2020 18:35	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.18.2020 18:35	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.18.2020 18:35	U	1
Total BTEX		0.00939	0.00198	mg/kg	08.18.2020 18:35		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.18.2020 18:35		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.18.2020 18:35		



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 30**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-005

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 14:50

Basis: Wet Weight

Seq Number: 3134906

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	61.9	4.95	mg/kg	08.18.2020 17:54		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.19.2020 15:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.19.2020 15:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.19.2020 15:27	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.19.2020 15:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	08.19.2020 15:27	
o-Terphenyl	84-15-1	91	%	70-130	08.19.2020 15:27	



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 30**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-005

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.2020 18:55	U	1
Toluene	108-88-3	0.0108	0.00200	mg/kg	08.18.2020 18:55		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.18.2020 18:55	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.18.2020 18:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.18.2020 18:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.18.2020 18:55	U	1
Total BTEX		0.0108	0.00200	mg/kg	08.18.2020 18:55		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.18.2020 18:55		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.18.2020 18:55		



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 31**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-006

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 14:50

Basis: Wet Weight

Seq Number: 3134906

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	138	4.95	mg/kg	08.18.2020 18:00		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.19.2020 15:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.19.2020 15:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.19.2020 15:48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.19.2020 15:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	08.19.2020 15:48	
o-Terphenyl	84-15-1	107	%	70-130	08.19.2020 15:48	



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 31**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-006

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.18.2020 19:16	U	1
Toluene	108-88-3	0.0100	0.00200	mg/kg	08.18.2020 19:16		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.18.2020 19:16	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.18.2020 19:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.18.2020 19:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.18.2020 19:16	U	1
Total BTEX		0.0100	0.00200	mg/kg	08.18.2020 19:16		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.18.2020 19:16		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.18.2020 19:16		



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 32**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-007

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 14:50

Basis: Wet Weight

Seq Number: 3134906

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	57.4	5.02	mg/kg	08.18.2020 18:06		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.19.2020 16:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.19.2020 16:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.19.2020 16:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.19.2020 16:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	08.19.2020 16:10	
o-Terphenyl	84-15-1	98	%	70-130	08.19.2020 16:10	



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 32**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-007

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.18.2020 19:36	U	1
Toluene	108-88-3	0.00893	0.00199	mg/kg	08.18.2020 19:36		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.18.2020 19:36	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.18.2020 19:36	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.18.2020 19:36	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.18.2020 19:36	U	1
Total BTEX		0.00893	0.00199	mg/kg	08.18.2020 19:36		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.18.2020 19:36		
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.18.2020 19:36		



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 33**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-008

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 14:50

Basis: Wet Weight

Seq Number: 3134906

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	69.8	4.96	mg/kg	08.18.2020 18:13		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.19.2020 16:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.19.2020 16:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.19.2020 16:33	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.19.2020 16:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	08.19.2020 16:33	
o-Terphenyl	84-15-1	117	%	70-130	08.19.2020 16:33	



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 33**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-008

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.18.2020 19:57	U	1
Toluene	108-88-3	0.0101	0.00199	mg/kg	08.18.2020 19:57		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.18.2020 19:57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.18.2020 19:57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.18.2020 19:57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.18.2020 19:57	U	1
Total BTEX		0.0101	0.00199	mg/kg	08.18.2020 19:57		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.18.2020 19:57		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.18.2020 19:57		



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 34**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-009

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 17:00

Basis: Wet Weight

Seq Number: 3134912

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	90.3	4.95	mg/kg	08.18.2020 18:50		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.19.2020 16:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.19.2020 16:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.19.2020 16:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.19.2020 16:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	08.19.2020 16:54	
o-Terphenyl	84-15-1	116	%	70-130	08.19.2020 16:54	



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 34**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-009

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.18.2020 20:17	U	1
Toluene	108-88-3	0.0109	0.00198	mg/kg	08.18.2020 20:17		1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.18.2020 20:17	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.18.2020 20:17	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.18.2020 20:17	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.18.2020 20:17	U	1
Total BTEX		0.0109	0.00198	mg/kg	08.18.2020 20:17		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.18.2020 20:17		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.18.2020 20:17		



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 35 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-010

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 17:00

Basis: Wet Weight

Seq Number: 3134912

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.3	4.99	mg/kg	08.18.2020 19:09		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.19.2020 17:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.19.2020 17:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.19.2020 17:16	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.19.2020 17:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	08.19.2020 17:16	
o-Terphenyl	84-15-1	104	%	70-130	08.19.2020 17:16	



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 35 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-010

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.18.2020 20:37	U	1
Toluene	108-88-3	0.0110	0.00201	mg/kg	08.18.2020 20:37		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.18.2020 20:37	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.18.2020 20:37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.18.2020 20:37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.18.2020 20:37	U	1
Total BTEX		0.0110	0.00201	mg/kg	08.18.2020 20:37		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.18.2020 20:37		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.18.2020 20:37		



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Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 36 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-011

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 17:00

Basis: Wet Weight

Seq Number: 3134912

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.9	5.03	mg/kg	08.18.2020 19:15		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.19.2020 17:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.19.2020 17:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.19.2020 17:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.19.2020 17:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	08.19.2020 17:59	
o-Terphenyl	84-15-1	111	%	70-130	08.19.2020 17:59	



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 36 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-011

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.18.2020 12:45

Basis: Wet Weight

Seq Number: 3134877

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.18.2020 20:58	U	1
Toluene	108-88-3	0.0116	0.00201	mg/kg	08.18.2020 20:58		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.18.2020 20:58	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.18.2020 20:58	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.18.2020 20:58	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.18.2020 20:58	U	1
Total BTEX		0.0116	0.00201	mg/kg	08.18.2020 20:58		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.18.2020 20:58		
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.18.2020 20:58		



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 37 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-012

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 17:00

Basis: Wet Weight

Seq Number: 3134912

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	54.2	4.97	mg/kg	08.18.2020 19:22		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.19.2020 18:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.19.2020 18:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.19.2020 18:21	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.19.2020 18:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	08.19.2020 18:21	
o-Terphenyl	84-15-1	111	%	70-130	08.19.2020 18:21	



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 37 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-012

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.19.2020 08:45

Basis: Wet Weight

Seq Number: 3134977

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.19.2020 12:27	UX	1
Toluene	108-88-3	0.00482	0.00199	mg/kg	08.19.2020 12:27	X	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.19.2020 12:27	UX	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.19.2020 12:27	UX	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.19.2020 12:27	UX	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.19.2020 12:27	U	1
Total BTEX		0.00482	0.00199	mg/kg	08.19.2020 12:27		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.19.2020 12:27		
1,4-Difluorobenzene	540-36-3	101	%	70-130	08.19.2020 12:27		



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 38 (6")** Matrix: Soil Date Received: 08.18.2020 12:30
 Lab Sample Id: 670276-013 Date Collected: 08.17.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.18.2020 17:00 Basis: Wet Weight
 Seq Number: 3134912

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.1	5.00	mg/kg	08.18.2020 19:28		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.19.2020 11:00 Basis: Wet Weight
 Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.19.2020 18:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.19.2020 18:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.19.2020 18:42	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.19.2020 18:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	08.19.2020 18:42	
o-Terphenyl	84-15-1	100	%	70-130	08.19.2020 18:42	



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 38 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-013

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.19.2020 08:45

Basis: Wet Weight

Seq Number: 3134977

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.19.2020 12:48	U	1
Toluene	108-88-3	0.00563	0.00199	mg/kg	08.19.2020 12:48		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.19.2020 12:48	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.19.2020 12:48	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.19.2020 12:48	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.19.2020 12:48	U	1
Total BTEX		0.00563	0.00199	mg/kg	08.19.2020 12:48		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	08.19.2020 12:48		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.19.2020 12:48		



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 39 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-014

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 17:00

Basis: Wet Weight

Seq Number: 3134912

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	53.9	5.00	mg/kg	08.18.2020 19:47		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.19.2020 19:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.19.2020 19:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.19.2020 19:04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.19.2020 19:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-130	08.19.2020 19:04	
o-Terphenyl	84-15-1	114	%	70-130	08.19.2020 19:04	



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 39 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-014

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.19.2020 08:45

Basis: Wet Weight

Seq Number: 3134977

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.19.2020 13:08	U	1
Toluene	108-88-3	0.00540	0.00201	mg/kg	08.19.2020 13:08		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.19.2020 13:08	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.19.2020 13:08	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.19.2020 13:08	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.19.2020 13:08	U	1
Total BTEX		0.00540	0.00201	mg/kg	08.19.2020 13:08		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.19.2020 13:08		
1,4-Difluorobenzene	540-36-3	102	%	70-130	08.19.2020 13:08		



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 40 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-015

Date Collected: 08.17.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.18.2020 17:00

Basis: Wet Weight

Seq Number: 3134912

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.8	5.03	mg/kg	08.18.2020 19:53		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.19.2020 11:00

Basis: Wet Weight

Seq Number: 3135110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.19.2020 19:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.19.2020 19:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.19.2020 19:26	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.19.2020 19:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	08.19.2020 19:26	
o-Terphenyl	84-15-1	97	%	70-130	08.19.2020 19:26	



Certificate of Analytical Results 670276

Tetra Tech- Midland, Midland, TX

Heart Throb to Riser No. 7

Sample Id: **Sidewall 40 (6")**

Matrix: Soil

Date Received: 08.18.2020 12:30

Lab Sample Id: 670276-015

Date Collected: 08.17.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.19.2020 08:45

Basis: Wet Weight

Seq Number: 3134977

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.19.2020 13:29	U	1
Toluene	108-88-3	0.00555	0.00200	mg/kg	08.19.2020 13:29		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.19.2020 13:29	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.19.2020 13:29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.19.2020 13:29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.19.2020 13:29	U	1
Total BTEX		0.00555	0.00200	mg/kg	08.19.2020 13:29		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.19.2020 13:29		
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.19.2020 13:29		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Tetra Tech- Midland

Heart Throb to Riser No. 7

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134906

Matrix: Solid

Prep Method: E300P

Date Prep: 08.18.2020

MB Sample Id: 7709705-1-BLK

LCS Sample Id: 7709705-1-BKS

LCSD Sample Id: 7709705-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	243	97	243	97	90-110	0	20	mg/kg	08.18.2020 15:11	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134912

Matrix: Solid

Prep Method: E300P

Date Prep: 08.18.2020

MB Sample Id: 7709707-1-BLK

LCS Sample Id: 7709707-1-BKS

LCSD Sample Id: 7709707-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	244	98	243	97	90-110	0	20	mg/kg	08.18.2020 18:38	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134906

Matrix: Soil

Prep Method: E300P

Date Prep: 08.18.2020

Parent Sample Id: 670257-001

MS Sample Id: 670257-001 S

MSD Sample Id: 670257-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	28.9	249	300	109	300	109	90-110	0	20	mg/kg	08.18.2020 15:29	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134906

Matrix: Soil

Prep Method: E300P

Date Prep: 08.18.2020

Parent Sample Id: 670276-001

MS Sample Id: 670276-001 S

MSD Sample Id: 670276-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	95.8	250	368	109	367	108	90-110	0	20	mg/kg	08.18.2020 16:57	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134912

Matrix: Soil

Prep Method: E300P

Date Prep: 08.18.2020

Parent Sample Id: 670276-009

MS Sample Id: 670276-009 S

MSD Sample Id: 670276-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	90.3	248	360	109	360	109	90-110	0	20	mg/kg	08.18.2020 18:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3134912

Matrix: Soil

Prep Method: E300P

Date Prep: 08.18.2020

Parent Sample Id: 670329-005

MS Sample Id: 670329-005 S

MSD Sample Id: 670329-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	184	248	437	102	442	104	90-110	1	20	mg/kg	08.19.2020 10:24	

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

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

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

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



Tetra Tech- Midland

Heart Throb to Riser No. 7

Analytical Method: TPH By SW8015 Mod

Seq Number: 3135110

MB Sample Id: 7709753-1-BLK

Matrix: Solid

LCS Sample Id: 7709753-1-BKS

Prep Method: SW8015P

Date Prep: 08.19.2020

LCSD Sample Id: 7709753-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1030	103	965	97	70-130	7	20	mg/kg	08.19.2020 12:34	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	947	95	70-130	8	20	mg/kg	08.19.2020 12:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		111		96		70-130	%	08.19.2020 12:34
o-Terphenyl	102		113		87		70-130	%	08.19.2020 12:34

Analytical Method: TPH By SW8015 Mod

Seq Number: 3135110

Matrix: Solid

MB Sample Id: 7709753-1-BLK

Prep Method: SW8015P

Date Prep: 08.19.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.19.2020 12:12	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3135110

Matrix: Soil

Parent Sample Id: 670276-001

MS Sample Id: 670276-001 S

Prep Method: SW8015P

Date Prep: 08.19.2020

MSD Sample Id: 670276-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	970	97	986	99	70-130	2	20	mg/kg	08.19.2020 13:38	
Diesel Range Organics (DRO)	<49.9	998	989	99	1000	100	70-130	1	20	mg/kg	08.19.2020 13:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		109		70-130	%	08.19.2020 13:38
o-Terphenyl	107		108		70-130	%	08.19.2020 13:38

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134877

Matrix: Solid

MB Sample Id: 7709678-1-BLK

LCS Sample Id: 7709678-1-BKS

Prep Method: SW5035A

Date Prep: 08.18.2020

LCSD Sample Id: 7709678-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0885	89	0.0869	87	70-130	2	35	mg/kg	08.18.2020 10:06	
Toluene	<0.00200	0.100	0.100	100	0.0975	98	70-130	3	35	mg/kg	08.18.2020 10:06	
Ethylbenzene	<0.00200	0.100	0.0903	90	0.0869	87	70-130	4	35	mg/kg	08.18.2020 10:06	
m,p-Xylenes	<0.00400	0.200	0.179	90	0.174	87	70-130	3	35	mg/kg	08.18.2020 10:06	
o-Xylene	<0.00200	0.100	0.0896	90	0.0867	87	70-130	3	35	mg/kg	08.18.2020 10:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		99		100		70-130	%	08.18.2020 10:06
4-Bromofluorobenzene	100		101		100		70-130	%	08.18.2020 10:06

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

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

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

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



Tetra Tech- Midland

Heart Throb to Riser No. 7

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134977

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.19.2020

MB Sample Id: 7709731-1-BLK

LCS Sample Id: 7709731-1-BKS

LCSD Sample Id: 7709731-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0830	83	0.0848	85	70-130	2	35	mg/kg	08.19.2020 10:05	
Toluene	<0.00200	0.100	0.0926	93	0.0854	85	70-130	8	35	mg/kg	08.19.2020 10:05	
Ethylbenzene	<0.00200	0.100	0.0846	85	0.0869	87	70-130	3	35	mg/kg	08.19.2020 10:05	
m,p-Xylenes	<0.00400	0.200	0.168	84	0.173	87	70-130	3	35	mg/kg	08.19.2020 10:05	
o-Xylene	<0.00200	0.100	0.0845	85	0.0876	88	70-130	4	35	mg/kg	08.19.2020 10:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		99		99		70-130	%	08.19.2020 10:05
4-Bromofluorobenzene	101		99		99		70-130	%	08.19.2020 10:05

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134877

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.18.2020

Parent Sample Id: 670253-001

MS Sample Id: 670253-001 S

MSD Sample Id: 670253-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.0145	0.0998	0.100	86	0.0945	80	70-130	6	35	mg/kg	08.18.2020 11:04	
Toluene	0.0465	0.0998	0.128	82	0.129	83	70-130	1	35	mg/kg	08.18.2020 11:04	
Ethylbenzene	0.0103	0.0998	0.0958	86	0.0910	81	70-130	5	35	mg/kg	08.18.2020 11:04	
m,p-Xylenes	0.0606	0.200	0.214	77	0.210	75	70-130	2	35	mg/kg	08.18.2020 11:04	
o-Xylene	0.00662	0.0998	0.0870	81	0.0840	78	70-130	4	35	mg/kg	08.18.2020 11:04	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		108		70-130	%	08.18.2020 11:04
4-Bromofluorobenzene	101		103		70-130	%	08.18.2020 11:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134977

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.19.2020

Parent Sample Id: 670276-012

MS Sample Id: 670276-012 S

MSD Sample Id: 670276-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0719	72	0.0686	69	70-130	5	35	mg/kg	08.19.2020 10:46	X
Toluene	0.00482	0.0998	0.0744	70	0.0712	67	70-130	4	35	mg/kg	08.19.2020 10:46	X
Ethylbenzene	<0.00200	0.0998	0.0700	70	0.0674	68	70-130	4	35	mg/kg	08.19.2020 10:46	X
m,p-Xylenes	<0.00399	0.200	0.138	69	0.133	67	70-130	4	35	mg/kg	08.19.2020 10:46	X
o-Xylene	<0.00200	0.0998	0.0695	70	0.0676	68	70-130	3	35	mg/kg	08.19.2020 10:46	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		99		70-130	%	08.19.2020 10:46
4-Bromofluorobenzene	102		103		70-130	%	08.19.2020 10:46

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

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

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

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

Analysis Request of Custody Record

Page 1 of 2



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

ANALYSIS REQUEST

10702710

Client Name: EOG		Site Manager: Conner Moehring	
Project Name: Heart Throb to Riser No. 7			
Project Location: Lea Co, NM (county, state)		Project #: 212C-MD-02149	
Invoice to: EOG - Galan Kelly			
Receiving Laboratory: Xenco		Sampler Signature: Conner Moehring	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	LAB USE ONLY	REMARKS:
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None				
	Sidewall 26	8/17/2020		X				X			1 N	X	
	Sidewall 27	8/17/2020		X				X			1 N	X	
	Sidewall 28	8/17/2020		X				X			1 N	X	
	Sidewall 29	8/17/2020		X				X			1 N	X	
	Sidewall 30	8/17/2020		X				X			1 N	X	
	Sidewall 31	8/17/2020		X				X			1 N	X	
	Sidewall 32	8/17/2020		X				X			1 N	X	
	Sidewall 33	8/17/2020		X				X			1 N	X	
	Sidewall 34	8/17/2020		X				X			1 N	X	
	Sidewall 35 (6")	8/17/2020		X				X			1 N	X	

Relinquished by: <i>Conner Moehring</i> 8/18/2020 1230	Received by: <i>BM</i> 9/18 1830
Date: 8/18/2020 Time: 1230	Date: 9/18 Time: 1830
Relinquished by:	Received by:
Date: Time:	Date: Time:

LAB USE ONLY	REMARKS:
☐ STANDARD	☒ RUSH: Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized	☐ Special Report Limits or TRRP Report

Sample Temperature	14/1.0
Hand Delivered	☒
FDEX	☐
UPS	☐
Tracking #:	

ORIGINAL COPY

Analysis Request of Custody Record

Page 2 of 2



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Client Name: EOG Site Manager: Conner Moehring

Project Name: Heart Throb to Riser No. 7

Project Location: Lea Co, NM Project #: 212C-MD-02149

Invoice to:

EOG - Galan Kelly

Receiving Laboratory:

Xenco

Sampler Signature:

Conner Moehring

Comments:

SAMPLE IDENTIFICATION

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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	Sidewall 36 (6")	8/17/2020		X			X					1 N	X	BTEX 8021B	BTEX 8260B																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

Relinquished by: Conner Moehring Date: 8/18/20 Time: 1236

Relinquished by: Date: Time:

Relinquished by: Date: Time:

Received by: [Signature] Date: 8/18/20 Time: 1230

Received by: Date: Time:

Received by: Date: Time:

LAB USE ONLY

Sample Temperature

1.4/1.0
-0.1

REMARKS:

☐ STANDARD☒ RUSH: Same Day 24 hr 48 hr 72 hr☐ Rush Charges Authorized☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

District I

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

District II

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

District III

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

District IV

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

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

CONDITIONS

Action 47989

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 47989
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NRM2007640658 RISER 7, thank you. This closure is approved.	1/27/2022