SITE INFORMATION									
	Re	port Type:	Closure Re	port	1RP-48	75			
General Site Info	ormation:								
Site:		Chili Parlor 17	Federal #3H						
Company:		Marathon Oil F	Permian, LLC.						
Section, Townsl	hip and Range	Unit M	Sec. 09	T 22S	R 33E				
Lease Number:		API No. 30-025	-43138						
County:		Lea County							
GPS:			32.4022º N			103.5	845º W		
Surface Owner:		Federal							
Mineral Owner:									
6.75 mi, turn s			thwest onto lease r th onto lease road oad for 0.90 mi, tur	oad and co for 1.15 mi	ontinue for 3.7 , turn west for	5 mi, turn wes 0.30 mi, turn	east on HWY 176 for st onto lease road for south for 1.25 mi, turn o two-track/ROW and		
Release Data:									
Date Released: 11/2/2017									
Type Release:		Produced Wate	er						
Source of Contan	nination.								
Fluid Released:									
Fluids Recovered	1:								
Official Commu	nication:	4							
Name:	Jennifer Van Curer				Ike Tavare	Z			
Company:	Marathon Oil				Tetra Tech				
Address:	5555 San Felipe St	reet			4000 N. Bi				
Auuress.	JJJJJ Jan Telipe J	ieet			Ste 401	g Spring			
0.1					-				
City:	Houston, TX 77056	)			Midland, Texas				
Phone number:	(713) 926-2500				(432) 687-	8110			
Fax:									
Email:	jvancuren@mara	<u>thonoil.com</u>			<u>lke.Tavar</u>	ez@tetratec	<u>h.com</u>		
Ranking Criteria	l								
Depth to Groundv	vater:		Ranking Score			Site Data			
<50 ft			20	1					
50-99 ft			10						
>100 ft.			0			375'-400'			
WellHead Protecti	ion:		Ranking Score			Site Data			
	000 ft., Private <200 f	t.	20	1					
Water Source >1,000 ft., Private >200 ft.			0			0			
Surface Body of V	Vater:		Ranking Score			Site Data			
<200 ft.									
200 ft - 1,000 ft.			10						
>1,000 ft.			0			0			
				-					
10	otal Ranking Scor	9:	0						

## Total Ranking Score:

Acceptable Soil RRAL (mg/kg)							
Benzene Total BTEX TPH							
10	50	5,000					



**APPROVED** By Olivia Yu at 11:12 am, Sep 12, 2018

March 9, 2018

NMOCD approves 1RP-4875 for closure.

Ms. Olivia Yu Environmental Engineer Specialist Oil Conservation Division, District 1 1625 North French Drive Hobbs, New Mexico 88240

#### Re: Closure Report for the Marathon Oil, Chili Parlor 17 Federal #3H, Unit M, Section 09, Township 22 South, Range 33 East, Lea County, New Mexico. 1RP-4875.

Ms. Yu:

Tetra Tech, Inc. (Tetra Tech) was contacted by Marathon Oil (Marathon) to assess and remediate a spill from Chili Parlor 17 Federal #3H, Unit M, Section 09, Township 22 South, Range 33 East, Lea County, New Mexico (site). The spill site coordinates are N 32.4022 °, W 103.5845 °. The site location is shown on Figures 1 and 2.

#### Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on November 2, 2017, and released approximately eighty (80) barrels of produced water due to a10" lay flat water transfer line being driven over. No fluids were recovered. The release occurred in the pasture and along a two-track road measuring approximately 60' x 95' and 18' x 975'. As a part of an emergency response, Marathon excavated the release area to approximately 2.0' below surface in order to remove the impacted soils. The initial C-141 form is included in Appendix A.

#### Groundwater

No water wells were listed within Section 09 on the New Mexico Office of the State Engineer's database or the USGS National Water Information System. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in this area is between 375' and 400' below surface. The groundwater data is shown in Appendix B.

#### Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. 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 depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.



#### **Soil Assessment and Analytical Results**

On November 30, 2017, Tetra Tech personnel were onsite to evaluate and sample the release area. Eighteen (18) bottom hole samples (AH-1 through AH-18) were collected from the release area, which was excavated to 2.0' below 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 sample locations are shown on Figure 3.

Referring to Table 1, none of the samples collected exceeded the laboratory reporting limits for benzene or total BTEX. Additionally, none of the samples collected showed TPH concentrations above the RRALs, with concentrations ranging from <14.9 mg/kg to 453 mg/kg.

The areas of bottom hole samples (AH-1, AH-3, AH-4, AH-5, AH-6, AH-7, AH-8, AH-9, AH-10, AH-11, AH-13, AH-14 and AH-17) showed chloride concentrations below the 600 mg/kg threshold. However, the areas of bottom hole samples (AH-2, AH-12, AH-15, AH-16 and AH-18) showed chloride concentrations of 8,580 mg/kg, 663 mg/kg, 798 mg/kg, 4,310 mg/kg, and 836 mg/kg, respectively.

#### **Remediation Activities**

On January 10-11, 2018, Tetra Tech personnel were onsite to supervise the additional excavation of the areas of AH-2, AH-12, AH-15, AH-16, and AH-18. The excavation areas and depths are shown on Figure 4 and highlighted (green) in Table 1. The areas of AH-12 and AH-18 were excavated to a total depth of 2.5' below surface and the areas of AH-2, AH-15 and AH-16 were excavated to a total depth of 3.0' below surface. All of the excavated material was hauled for proper disposal.

In order to ensure all of the impacted material was properly removed, bottom hole samples (AH-2B, AH-12B, AH-15B, AH-16B, and AH-18B) were collected as well as appropriate sidewall samples in each area. The samples were analyzed for chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The sampling locations are shown on Figure 3.

Referring to Table 1, all of the bottom hole and sidewall samples showed chloride concentrations below the 600 mg/kg threshold. Once the excavation was completed, Marathon sent the final confirmation data to the NMOCD and BLM to review and approve the site for backfilling. Once approved, the excavations were backfilled with clean material to surface grade.



#### **Conclusions and Recommendations**

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

Respectfully submitted, TETRA TECH

4 TS

Ike Tavarez, PG Senior Project Manager

ais Clongalos

Clair Gonzales, Project Manager

cc: Callie Karrigan - Marathon Shelly Tucker - BLM

# Figures



Mapped By: Isabel Marmolejo



Mapped By: Isabel Marmolejo





# Tables

#### Table 1 Marathon Chili Parlor 17 Federal 3H Transfer Line Lea County, New Mexico

	Sample	Sample	Excavation	Soil	Status		TPH (	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	Bottom (ft)	In-Situ	Removed	C6-C10	C10-C28	C28-C35	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH#1	11/30/2017	0-6"	2'	х		<14.9	<14.9	<14.9	<14.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	53.3
AH#2	11/30/2017	0-3"	2'		Х	<15.0	26.8	<15.0	26.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	8580
AH#2B Bottom Hole	1/11/2018	-	3'	х		-	-	-	-	-	-	-	-	-	39.2
AH#2B North Sidewall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	48.2
AH#2B South Sidewall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	357
AH#2B East Sidewall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	7.59
AH#2B West Sidewall	1/11/2018	-	-	х		-	-	-	-	-	-	-	-	-	92.2
AH#3	11/30/2017	0-6"	2'	Х		<15.0	23.5	<15.0	23.5	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	297
AH#4	11/30/2017	0-3"	2'	х		<14.9	<14.9	<14.9	<14.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	61.1
AH#5	11/30/2017	0-3"	2'	Х		<15.0	71.3	<15.0	71.3	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	146
AH#6	11/30/2017	0-6"	2'	Х		<15.0	30.5	<15.0	30.5	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<4.99
AH#7	11/30/2017	0-3"	2'	Х		<15.0	<15.0	<15.0	<15.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5.82
AH#8	11/30/2017	0-6"	2'	Х		<15.0	<15.0	<15.0	<15.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	175
AH#9	11/30/2017	0-3"	2'	Х		<15.0	24.7	<15.0	24.7	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	12.8
AH#10	11/30/2017	0-3"	2'	Х		<15.0	344	109	453	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	223
AH#11	11/30/2017	0-3"	2'	Х		<15.0	17.2	<15.0	17.2	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	36.9
AH#12	11/30/2017	0-3"	2'		х	<15.0	53.0	<15.0	53.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	663
AH#12B Bottom Hole	1/11/2018	-	2.5'	Х		-	-	-	-	-	-	-	-	-	<4.99
AH#12B North Sidewall	1/11/2018	-	-	х		-	-	-	-	-	-	-	-	-	<4.93
AH#12B South Sidewall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	<4.97
AH#12B East Sidewall	1/11/2018	-	-	х		-	-	-	-	-	-	-	-	-	<4.95
AH#12B West Sidewall	1/11/2018	-	-	х		-	-	-	-	-	-	-	-	-	8.58

#### Table 1 Marathon Chili Parlor 17 Federal 3H Transfer Line Lea County, New Mexico

Comula ID	Sample	Sample	Excavation	Soil	Status		TPH (	(mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	Bottom (ft)	In-Situ	Removed	C6-C10	C10-C28	C28-C35	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH#13	11/30/2017	0-3"	2'	х		<14.9	35.8	<14.9	35.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	292
AH#14	11/30/2017	0-6"	2'	Х		<15.0	<15.0	<15.0	<15.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	118
AH#15	11/30/2017	0-6"	2'		х	<15.0	50.8	<15.0	50.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	798
AH#15B Bottom Hole	1/11/2018	-	3'	Х		-	-	-	-	-	-	-	-	-	83.1
AH#15B North Sidewall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	8.66
AH#15B East Sidewall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	<4.98
AH#15B West Sidewall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	<4.95
AH#16	11/30/2017	0-6"	2'		Х	<15.0	<15.0	<15.0	<15.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4310
AH#16B Bottom Hole	1/11/2018	-	3'	Х		-	-	-	-	-	-	-	-	-	<4.93
AH#16B South SideWall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	34.9
AH#16B East Sidewall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	60.0
AH#16B West Sidewall	1/11/2018	-	-	Х		-	-	-	-	-	-	-	-	-	51.5
AH#17	11/30/2017	0-6"	2'	х		<14.9	<14.9	<14.9	<14.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	64.1
AH#18	11/30/2017	0-3"	2'		Х	<15.0	<15.0	<15.0	<15.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	836
AH#18B Bottom Hole	1/11/2018		2.5'	Х		-	-	-	-	-	-	-	-	-	23.6
AH#18B North Sidewall	1/11/2018	-	-	х		-	-	-	-	-	-	-	-	-	<4.97
AH#18B South Sidewall	1/11/2018	-	-	х		-	-	-	-	-	-	-	-	-	5.74
AH#18B East Sidewall	1/11/2018	-	-	х		-	-	-	-	-	-	-	-	-	204
AH#18B West Sidewall	1/11/2018	-	-	х		-	-	-	-	-	-	-	-	-	189

(-) Not Analyzed

Areas Excavated and Removed

# Photos



View South – Initial excavation along two-track



View North - Initial excavation along two-track



View East - Initial excavation area



View West – Additional excavation in the area of AH-2



View East – Additional excavation in the area of AH-12



View East – Additional excavation in the areas of AH-15 and AH-16



View South – Additional Excavation in the area of AH-18

# Appendix A

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Fran	220 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505											
<b>Release Notification and Corrective Action</b>												
						OPERAT	OR		🛛 Initia	al Report		Final Report
	<u> </u>	arathon Oil I				Contact Raqu						
				exas 77056			<u>b. 281-910-044</u>			-0988 (offic	ce)	
Facility Nar	ne: Chili I	Parlor 17 Fed	eral 03H		ł	facility Type	: Oil and gas d	irıllıng	facility			
Surface: Ow	ner: Fede	ral		Mineral:	Owner: 1	Federal			API No	. : 30-025-4	3138	
				LOCA	ATION	OF REL	EASE					
Unit Letter	Section	Township	Range	Feet from the			Feet from the		West Line	County		
М	9	22S	33E	240	SL		2200	EL		Lea		
				Latitude 32.	4022	Longitude	-103.5845					
				NAT	<b>URE</b>	OF RELE						
Type of Relea		£ 1:					Release: 80 bbls			Recovered : (		
Source of Rel	lease: 1 rans	ster line				Date and Ho	ur of Occurrenc	ce	Date and	Hour of Disc	covery	
Was Immedia	ate Notice (					If YES, To Y			•			
			Yes	No 🗌 Not R	equired	Shelly Tuck						
By Whom? Jo Was a Water							ur 11/2/2017 1: ume Impacting t		arao11#60			
was a water			Yes 🗵	No				une wau	ercourse.			
If a Watercourse was Impacted, Describe Fully.*												
Not applicabl		puerea, 2 eser	ee i uniji									
						By	Olivia Yu	u at 8	8:06 an	n, Nov 2	20, 2	2017
As a result of produced wa Due to locat approval fro	of a ranch ater from t ion and hi om BLM in	he Chili Parl gh infiltratio nitiated clear	over and or 17-3H n rate of up.	d puncturing, w I to the pond, a soil immediate	spill of a	pproximatel	y 80 bbls was	release	d. The line	e was not in	use a	at the time.
Actual location 800' in a national sector and the sector sector sector and the sector	on of spill i rrow patte	rn. Clean up	31 long - crew ha	ten.* 103.560145, in s initiated NM w corrective ac	one call a	and spill clea						
regulations al public health should their o or the environ	l operators or the envi operations h nment. In a	are required to ronment. The have failed to a	o report ar acceptanc dequately CD accep	is true and comp ad/or file certain the of a C-141 rep investigate and a tance of a C-141	release no ort by the remediate	tifications and NMOCD man contaminatio	l perform correc ked as "Final R n that pose a thr	ctive act eport" c reat to gr	ions for rele loes not reli round water	eases which a eve the oper r, surface wa	may en ator of ter, hu	ndanger f liability man health
Signatura: Da	auel Chas						OIL CON	SERV	ATION	DIVISIO	N	
Signature: Ra Printed Name					A	Approved by E	nvironmental S	pecialis	t:	$\square$		
Title: Sr HE	S Environm	ental Professi	onal		Δ	Approval Date	11/20/20	)17	Expiration 1	U Date:	_	
												/
E-mail Addre	ess: rchacor	@marathonoi	I.com		_	Conditions of A				Attached	N	/
Date: 11/8/20 Phone: 281-9		cell) 575-297	/-0988 (o	office)	ڊ ا	see attach	ned directiv	'e		/ Intuction	<b></b>	

\* Attach Additional Sheets If Necessary

1RP-4	1875
-------	------

nOY1732430277

pOY1732434235

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

## **Release Notification and Corrective Action**

		<b>OPERATOR</b>	[	Initial Report	🛛 Final 🛛	Report
Name of Company Marathon Oil Permian, L	LC.	Contact Raquel Chao	con			
Address 5555 San Felipe Street, Houston, Tex	xas 77056	Telephone No. (575)2	97-0988			
Facility Name Chili Parlor 17 Federal #3H		Facility Type Oil an	d Gas Drillir	ng Facility		
Surface Owner: Federal	Mineral Owner	: Federal		API No. 30-025-4	3138	

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
М	09	22S	33E	240'	South	2200	East	Lea

Latitude N 32.4022° Longitude W 103.5845°

#### NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release 80 bbls	Volume Recovered: 0 bbls						
Source of Release: Transfer Line	Date and Hour of Occurrence	Date and Hour of Discovery						
Was Immediate Notice Given?	If YES, To Whom? Shelly Tucker, BLM							
By Whom? Jennifer Van Curen	Date and Hour 11/02/17 1:00 p.m.							
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	ercourse.						
🗌 Yes 🖾 No	N/A							
If a Watercourse was Impacted, Describe Fully.* N/A	<b>APPROVED</b> By Olivia Yu at 11	:10 am, Sep 12, 2018						
Describe Cause of Problem and Remedial Action Taken.* A ranch hand drove over a 10" lay flat line, resulting in the release. With BLM approval, the area was immediately dug to 2.0' below surface in order to remove the impacted soils.								
Describe Area Affected and Cleanup Action Taken.* The release occurred inside the pasture and along a two-track. Tetra Tech inspected the site and collected samples to ensure the proper removal of impacted soils. Soil that exceeded 600 mg/kg chlorides was removed and hauled for proper disposal. The site was then brought up to surface grade with clean backfill material. Tetra Tech prepared a closure report and submitted to the NMOCD and BLM for review.								
I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release ne public health or the environment. The acceptance of a C-141 report by the should their operations have failed to adequately investigate and remediate or the environment. In addition, NMOCD acceptance of a C-141 report defederal, state, or local laws and/or regulations.	otifications and perform corrective acti e NMOCD marked as "Final Report" d e contamination that pose a threat to gr	ions for releases which may endanger loes not relieve the operator of liability ound water, surface water, human health						
Signature:	OIL CONSERVATION DIVISION							
Printed Name: Ike Tavarez	Approved by District Supervisor:							
Title: Project Manager	Approval Date: 9/12/2018	Expiration Date: XX/XX/XXXX						
	Conditions of Approval:	Attached						
Date: 2/9/18 Phone: (432) 682-4559	BLM approval							

\* Attach Additional Sheets If Necessary



Appendix B

#### Water Well Data Average Depth to Groundwater (ft) Marathon - Chili Parlor 17 Federal #3H Lea County, New Mexico

	21 \$	South	;	32 East	t
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

	22 So	outh	32	East	
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14 382 350	13
19 (S) <b>280</b>	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

	23	South	:	32 Eas	t
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21 <b>400</b>	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

	21 Sc	outh	33	East	
6	5	4	3	2 <b>79</b>	1
				107	
7	8	9	10	11 <b>150</b>	12
18	17	16	15	14	13
143					
19	20	21	22	23	24
30	29	28	27	26	25
		179			
31	32	33 <mark>180</mark>	34	35	36

33 East

33 East

<mark>391</mark>

22 South

23 South

	21 Sc	outh	34		
6	5	4 <b>95</b>	3	2	1
7	8 <mark>120</mark>	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28 <b>140</b>	27	26	25
31	32	33	34	35	36

	22 S	outh	34	East	
6	5	4	3	2	1
7	8	9	10	11 <b>30</b>	12 <b>50</b>
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 Sc	outh	34	East	
6	5	4	3	2	1
7	8 <b>225</b>	9	10	11	12
18	17	16	15 <b>430</b>	14 <b>318</b>	13
19	20	21	22 <b>295</b>	23 <b>265</b>	24
30	29	28	27	26	25
31	32 <b>130</b>	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
- 123 Tetra Tech installed temporary wells and field water level
- 143 NMOCD Groundwater map well location

	vvat	er	COL	um	<b>n/</b>	A	ver	age	рер	tn to	Water
(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD replaced, O=orpha C=the fil closed)	ned,	(qua	arters are				,	3 UTM in mete	rs)	(In feet)
		POD		0.00							
POD Number CP 00592 POD1	Code	Sub- basin CP	County ED		Sec	Tws 22S		<b>X</b> 638834	<b>Y</b> 3585015*	DepthWel	Water IDepthWater Column 7
									Average Depth	to Water:	
									Minim	um Depth:	
									Maxim	um Depth:	
Record Count: 1											
PLSS Search:											
Township: 22S	Range:	33E									
*UTM location was derived fi	nom DI CC	oo Holn									

2/8/18 9:50 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Appendix C

# Analytical Report 570208

for Tetra Tech- Midland

**Project Manager: Ike Tavarez** 

Chil Parlor 17 Federal #3H Transfer Line

### 212C-MD-01042

### 14-DEC-17

Collected By: Client





### 1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12) Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



14-DEC-17

SUP ACCREDIES

Project Manager: **Ike Tavarez Tetra Tech- Midland** 4000 N. Big Spring Suite 401 Midland, TX 79705

Reference: XENCO Report No(s): **570208** Chil Parlor 17 Federal #3H Transfer Line Project Address: Lea County,New Mexico

#### Ike Tavarez:

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) 570208. 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. 570208 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,

le p

Mike Kimmel Client Services Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



#### Sample Id

AH#1 (0-6") 2'BEB
AH#2 (0-3") 2'BEB
AH#3 (0-6") 2'BEB
AH#4 (0-3") 2'BEB
AH#5 (0-3") 2'BEB
AH#6 (0-6") 2'BEB
AH#7 (0-3") 2'BEB
AH#8 (0-6") 2'BEB
AH#9 (0-3") 2'BEB
AH#10 (0-3") 2'BEB
AH#11 (0-3") 2'BEB
AH#12 (0-3") 2'BEB
AH#13 (0-3") 2'BEB
AH#14 (0-6") 2'BEB
AH#15 (0-6") 2'BEB
AH#16 (0-6") 2'BEB
AH#17 (0-6") 2'BEB
AH#18 (0-3") 2'BEB

## Sample Cross Reference 570208



Chil Parlor 17 Federal #3H Transfer Line

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	11-30-17 00:00		570208-001
S	11-30-17 00:00		570208-002
S	11-30-17 00:00		570208-003
S	11-30-17 00:00		570208-004
S	11-30-17 00:00		570208-005
S	11-30-17 00:00		570208-006
S	11-30-17 00:00		570208-007
S	11-30-17 00:00		570208-008
S	11-30-17 00:00		570208-009
S	11-30-17 00:00		570208-010
S	11-30-17 00:00		570208-011
S	11-30-17 00:00		570208-012
S	11-30-17 00:00		570208-013
S	11-30-17 00:00		570208-014
S	11-30-17 00:00		570208-015
S	11-30-17 00:00		570208-016
S	11-30-17 00:00		570208-017
S	11-30-17 00:00		570208-018



## CASE NARRATIVE

Client Name: Tetra Tech- Midland Project Name: Chil Parlor 17 Federal #3H Transfer Line

Project ID: 212C-MD-01042 Work Order Number(s): 570208 
 Report Date:
 14-DEC-17

 Date Received:
 12/05/2017

#### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3035409 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3035474 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3035491 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 570208

Tetra Tech- Midland, Midland, TX

Project Name: Chil Parlor 17 Federal #3H Transfer Line



Project Id:212C-MD-01042Contact:Ike TavarezProject Location:Lea County,New Mexico

Date Received in Lab:Tue Dec-05-17 03:37 pmReport Date:14-DEC-17Project Manager:Kelsey Brooks

	Lab Id:	570208-0	001	570208-	002	570208-0	003	570208-0	004	570208-	005	570208-0	)06	
	Field Id:	AH#1 (0-6")	2'BEB	AH#2 (0-3")	2'BEB	AH#3 (0-6")	2'BEB	AH#4 (0-3")	2'BEB	AH#5 (0-3")	2'BEB	AH#6 (0-6")	2'BEB	
Analysis Requested	Depth:													
	Matrix:	SOIL		SOIL	SOIL		SOIL			SOIL		SOIL		
	Sampled:	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	
BTEX by EPA 8021B	Extracted:	Dec-08-17	15:00	Dec-08-17	15:00	Dec-09-17	09:00	Dec-09-17	09:00	Dec-09-17	09:00	Dec-09-17	09:00	
	Analyzed:	Dec-09-17	02:25	Dec-09-17	02:43	Dec-09-17	12:34	Dec-09-17	12:53	Dec-09-17	13:12	Dec-09-17	13:31	
	Units/RL:	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	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00200	0.00200	
Toluene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00200	0.00200	
Ethylbenzene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00200	0.00200	
m,p-Xylenes		< 0.00399	0.00399	< 0.00400	0.00400	< 0.00399	0.00399	< 0.00403	0.00403	< 0.00401	0.00401	< 0.00399	0.00399	
o-Xylene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00200	0.00200	
Total Xylenes		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00200	0.00200	
Total BTEX		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00200	0.00200	
Inorganic Anions by EPA 300/300.1	Extracted:	Dec-07-17	16:30	Dec-07-17 16:30		Dec-07-17 16:30 Dec-07-		Dec-07-17	Dec-07-17 16:30		Dec-07-17 16:30		Dec-07-17 16:30	
	Analyzed:	Dec-07-17	22:42	Dec-07-17	22:48	Dec-07-17	22:54	Dec-07-17	23:00	Dec-07-17	23:18	Dec-07-17	23:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		53.3	4.92	8580	49.0	297	4.92	61.1	4.94	146	5.00	<4.99	4.99	
TPH By SW8015 Mod	Extracted:	Dec-06-17	11:00	Dec-06-17	11:00	Dec-06-17	11:00	Dec-06-17	11:00	Dec-06-17	11:00	Dec-06-17	11:00	
	Analyzed:	Dec-06-17	16:35	Dec-06-17	16:55	Dec-06-17	17:21	Dec-06-17	17:41	Dec-06-17	18:01	Dec-06-17	18:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	
Diesel Range Organics (DRO)		<14.9	14.9	26.8	15.0	23.5	15.0	<14.9	14.9	71.3	15.0	30.5	15.0	
Oil Range Hydrocarbons (ORO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	<15.0	15.0	
Total TPH		<14.9	14.9	26.8	15.0	23.5	15.0	<14.9	14.9	71.3	15.0	30.5	15.0	

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 - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Mike Kimmel Client Services Manager



Certificate of Analysis Summary 570208

Tetra Tech- Midland, Midland, TX

Project Name: Chil Parlor 17 Federal #3H Transfer Line



Project Id:212C-MD-01042Contact:Ike TavarezProject Location:Lea County,New Mexico

Date Received in Lab:Tue Dec-05-17 03:37 pmReport Date:14-DEC-17Project Manager:Kelsey Brooks

	Lab Id:	570208-0	007	570208-0	008	570208-0	009	570208-0	010	570208-	011	570208-0	012	
	Field Id:	AH#7 (0-3")	2'BEB	AH#8 (0-6")	2'BEB	AH#9 (0-3")	2'BEB	AH#10 (0-3")	2'BEB	AH#11 (0-3"	) 2'BEB	AH#12 (0-3")	) 2'BEB	
Analysis Requested	Depth:													
	Matrix:	SOIL		SOIL	SOIL		SOIL			SOIL		SOIL		
	Sampled:	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	
BTEX by EPA 8021B	Extracted:	Dec-09-17	09:00	Dec-09-17	09:00	Dec-09-17	09:00	Dec-09-17	09:00	Dec-09-17	09:00	Dec-09-17	09:00	
	Analyzed:	Dec-09-17	13:50	Dec-09-17	14:09	Dec-09-17	14:28	Dec-09-17	14:47	Dec-09-17	15:06	Dec-09-17	15:25	
	Units/RL:	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	< 0.00199	0.00199	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00200	0.00200	
Toluene		< 0.00200	0.00200	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00200	0.00200	
Ethylbenzene		< 0.00200	0.00200	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00200	0.00200	
m,p-Xylenes		< 0.00399	0.00399	< 0.00402	0.00402	< 0.00398	0.00398	< 0.00404	0.00404	< 0.00402	0.00402	< 0.00399	0.00399	
o-Xylene		< 0.00200	0.00200	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00200	0.00200	
Total Xylenes		< 0.00200	0.00200	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00200	0.00200	
Total BTEX		< 0.00200	0.00200	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00200	0.00200	
Inorganic Anions by EPA 300/300.1	Extracted:	Dec-07-17	16:30	Dec-07-17 16:30		Dec-07-17 16:30 Dec-		Dec-07-17	Dec-07-17 16:30		Dec-07-17 16:30		Dec-07-17 16:30	
	Analyzed:	Dec-07-17	23:30	Dec-07-17	23:36	Dec-07-17	23:42	Dec-07-17	23:48	Dec-08-17	00:05	Dec-08-17	00:11	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		5.82	4.98	175	4.90	12.8	4.90	223	4.90	36.9	4.97	663	4.99	
TPH By SW8015 Mod	Extracted:	Dec-06-17	11:00	Dec-06-17	11:00	Dec-06-17	11:00	Dec-06-17	11:00	Dec-06-17	11:00	Dec-06-17	11:00	
	Analyzed:	Dec-06-17	19:22	Dec-06-17	19:42	Dec-06-17	20:02	Dec-06-17	20:21	Dec-06-17	20:42	Dec-06-17	21:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0	
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	24.7	15.0	344	15.0	17.2	15.0	53.0	15.0	
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	109	15.0	<15.0	15.0	<15.0	15.0	
Total TPH		<15.0	15.0	<15.0	15.0	24.7	15.0	453	15.0	17.2	15.0	53.0	15.0	

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 - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Mike Kimmel Client Services Manager



Certificate of Analysis Summary 570208

Tetra Tech- Midland, Midland, TX

Project Name: Chil Parlor 17 Federal #3H Transfer Line



Project Id:212C-MD-01042Contact:Ike TavarezProject Location:Lea County,New Mexico

Date Received in Lab:Tue Dec-05-17 03:37 pmReport Date:14-DEC-17Project Manager:Kelsey Brooks

	Lab Id:	570208-0	013	570208-0	014	570208-0	015	570208-0	016	570208-	017	570208-0	018	
Analysis Requested	Field Id:	AH#13 (0-3")	) 2'BEB	AH#14 (0-6")	AH#14 (0-6") 2'BEB		AH#15 (0-6") 2'BEB		AH#16 (0-6") 2'BEB		AH#17 (0-6") 2'BEB		) 2'BEB	
Analysis Requested	Depth:													
	Matrix:	SOIL	,	SOIL		SOIL		SOIL	,	SOIL		SOIL	,	
	Sampled:	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	Nov-30-17	00:00	
BTEX by EPA 8021B	Extracted:	Dec-10-17	09:15	Dec-10-17	09:15	Dec-10-17	09:15	Dec-10-17	09:15	Dec-10-17	09:15	Dec-10-17	09:15	
	Analyzed:	Dec-10-17	20:30	Dec-10-17	20:49	Dec-10-17	21:07	Dec-10-17	21:26	Dec-10-17	21:45	Dec-10-17	22:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene		< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00202	0.00202	
Toluene		< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00202	0.00202	
Ethylbenzene		< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00202	0.00202	
m,p-Xylenes		< 0.00403	0.00403	< 0.00401	0.00401	< 0.00398	0.00398	< 0.00399	0.00399	< 0.00402	0.00402	< 0.00403	0.00403	
o-Xylene		< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00202	0.00202	
Total Xylenes		< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00202	0.00202	
Total BTEX		< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200	< 0.00201	0.00201	< 0.00202	0.00202	
Inorganic Anions by EPA 300/300.1	Extracted:	Dec-07-17	16:30	Dec-07-17 16:30		Dec-07-17 16:30 Dec-		Dec-07-17	Dec-07-17 16:30		Dec-07-17 16:30		Dec-07-17 16:30	
	Analyzed:	Dec-08-17	00:29	Dec-08-17	00:35	Dec-08-17	00:41	Dec-08-17	13:51	Dec-08-17	00:53	Dec-08-17	00:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		292	4.99	118	4.92	798	4.94	4310	49.8	64.1	4.95	836	4.92	
TPH By SW8015 Mod	Extracted:	Dec-06-17	11:00	Dec-06-17	11:00	Dec-06-17	11:00	Dec-07-17	12:00	Dec-07-17	12:00	Dec-07-17	12:00	
	Analyzed:	Dec-06-17	21:25	Dec-06-17	21:45	Dec-06-17	22:05	Dec-07-17	14:34	Dec-07-17	15:33	Dec-07-17	15:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Gasoline Range Hydrocarbons (GRO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	
Diesel Range Organics (DRO)		35.8	14.9	<15.0	15.0	50.8	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	
Oil Range Hydrocarbons (ORO)		<14.9	14.9	<15.0	15.0	<15.0	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	
Total TPH		35.8	14.9	<15.0	15.0	50.8	15.0	<15.0	15.0	<14.9	14.9	<15.0	15.0	

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 - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Version: 1.%

Mike Kimmel Client Services 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.
- 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
- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

#### Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

#### A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102, Tempe AZ 85282	(602) 437-0330	



	<b>:ders :</b> 57020 #: 3035197	8, Sample: 570208-001 / SMP	Batch		212C-MD-( Soil	01042		
Units:	mg/kg	<b>Date Analyzed:</b> 12/06/17 16:35	SURROGATE RECOVERY STUDY					
	TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	ane	Analytes	88.1	99.6	88	70-135		
o-Terpheny			48.8	49.8	98	70-135		
	#: 3035197	Sample: 570208-002 / SMP	Batch			70-135		
Units:	mg/kg	<b>Date Analyzed:</b> 12/06/17 16:55		RROGATE R	-	STUDY		
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	tane		95.1	99.9	95	70-135		
o-Terpheny			50.1	50.0	100	70-135		
	#: 3035197	Sample: 570208-003 / SMP	Batch			10 155		
Units:mg/kgDate Analyzed: 12/06/17 17:21SURROGATE						STUDY		
	TPH I	3y SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	ane	Analytes	93.7	99.7	94	70-135		
o-Terpheny					-			
	#: 3035197	Sample: 570208-004 / SMP	48.7 Batch	49.9	98 • Soil	70-135		
Units:	mg/kg	Date Analyzed: 12/06/17 17:41	Batch: 1 Matrix: Soil SURROGATE RECOVERY STUDY					
	TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane			90.9	99.6	91	70-135		
o-Terphenyl			47.2	49.8	95	70-135		
Lab Batch	#: 3035197	Sample: 570208-005 / SMP	Batch	h: 1 Matrix	Soil			
Units:	mg/kg	Date Analyzed: 12/06/17 18:01	SU	RROGATE R	ECOVERY	STUDY		
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
					+			
1-Chlorooct	tane		88.6	99.8	89	70-135		

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B



	<b>:ders :</b> 57020 #: 3035197	8, Sample: 570208-006 / SMP	Batcl		212C-MD-0	01042		
Units:	mg/kg	Date Analyzed: 12/06/17 18:21	SURROGATE RECOVERY STUDY					
	TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	ane	Analytes	90.2	99.8	90	70-135		
o-Terpheny			47.3	49.9	90	70-135		
	#: 3035197	Sample: 570208-007 / SMP	Batcl			70-135		
Units:	mg/kg	Date Analyzed: 12/06/17 19:22		RROGATE R	-	STUDY		
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	tane		90.6	99.7	91	70-135		
o-Terpheny			46.4	49.9	93	70-135		
	#: 3035197	Sample: 570208-008 / SMP	Batcl			10 155		
Units:     mg/kg     Date Analyzed: 12/06/17 19:42     SURROGATE RECOVER						STUDY		
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	ane		90.9	100	91	70-135		
o-Terpheny			47.4	50.0	95	70-135		
	#: 3035197	Sample: 570208-009 / SMP	Batcl			10 155		
Units:	mg/kg	Date Analyzed: 12/06/17 20:02	SURROGATE RECOVERY STUDY					
	TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	tane		89.7	99.9	90	70-135		
o-Terpheny	1		46.7	50.0	93	70-135		
Lab Batch	#: 3035197	Sample: 570208-010 / SMP	Batcl	h: 1 Matrix	Soil			
Units:	mg/kg	Date Analyzed: 12/06/17 20:21	SU	RROGATE R	ECOVERY S	STUDY		
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
	ane		89.6	99.9	90	70-135		
1-Chlorooct	lune	o-Terphenyl						

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B



	<b>:ders :</b> 57020 #: 3035197	8, Sample: 570208-011 / SMP	Batcl		212C-MD-(	01042		
Units:	mg/kg	Date Analyzed: 12/06/17 20:42	SURROGATE RECOVERY STUDY					
	TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	ane	Anarytes	91.1	99.7	91	70-135		
o-Terpheny			45.9	49.9	91	70-135		
	#: 3035197	Sample: 570208-012 / SMP	Batcl			70-135		
Units:	mg/kg	Date Analyzed: 12/06/17 21:04		RROGATE R		STUDY		
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	tane		86.9	99.7	87	70-135		
o-Terpheny			42.9	49.9	86	70-135		
	#: 3035197	Sample: 570208-013 / SMP	Batcl			10 155		
Units:	mg/kg	Date Analyzed: 12/06/17 21:25		RROGATE R		STUDY		
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	ane		74.8	99.6	75	70-135		
o-Terpheny			40.3	49.8	81	70-135		
	#: 3035197	Sample: 570208-014 / SMP	Batcl			10 155		
Units:	mg/kg	<b>Date Analyzed:</b> 12/06/17 21:45	SURROGATE RECOVERY STUDY					
	TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooct	tane		88.5	99.9	89	70-135		
o-Terpheny	1		45.0	50.0	90	70-135		
Lab Batch	#: 3035197	Sample: 570208-015 / SMP	Batcl	h: 1 Matrix	: Soil	1 1		
Units:	mg/kg	Date Analyzed: 12/06/17 22:05	SU	RROGATE R	ECOVERY	STUDY		
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
			87.6	99.9	88	70-135		
1-Chlorooct	lane		07.0	,,,,		,0155		

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B



	<b>ders :</b> 57020 #: 3035310	Sample: 570208-016 / SMP	Batcl	Project ID					
Units:	mg/kg	Date Analyzed: 12/07/17 14:34	SURROGATE RECOVERY STUDY						
	TPH I	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
1.011		Analytes			[D]				
1-Chlorooct			91.7	99.8	92	70-135			
o-Terpheny	#: 3035310	Samelar 570208 017 / SMD	46.9	49.9 h: 1 Matrix	94	70-135			
		Sample: 570208-017 / SMP	Batcl		-				
Units:	mg/kg	Date Analyzed: 12/07/17 15:33	SU	RROGATE R	ECOVERY	STUDY			
TPH By SW8015 Mod Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooct			88.3	99.6	89	70-135			
o-Terpheny			46.4	49.8	93	70-135			
	#: 3035310	Sample: 570208-018 / SMP	Batcl			10 100			
Units:	mg/kg	Date Analyzed: 12/07/17 15:52	SU	RROGATE R		STUDY			
				True		Control			
TPH By SW8015 Mod			Amount Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flags		
Analytes 1-Chlorooctane			90.8	99.8	91	70-135			
o-Terpheny					-				
		Sample: 570208-001 / SMP	48.0 Batel	49.9 h: 1 Matrix	96	70-135			
Lab Batch #:         3035409         Sample:         570208-001 / SMP			Batch: 1 Matrix: Soil SURROGATE RECOVERY STUDY						
Units:	mg/kg	Date Analyzed: 12/09/17 02:25	SU	RROGATE R	ECOVERY	STUDY			
	ВТЕХ	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobenzene			0.0262	0.0300	87	80-120			
4-Bromofluorobenzene			0.0271	0.0300	90	80-120			
Lab Batch	#: 3035409	Sample: 570208-002 / SMP	Batcl	h: 1 Matrix	: Soil				
Units:	mg/kg	Date Analyzed: 12/09/17 02:43	SU	RROGATE R	ECOVERY	STUDY			
BTEX by EPA 8021B Analytes			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1.4-Difluorobenzene			0.0271	0.0300	90	80-120			
1,4 Diffuor	4-Bromofluorobenzene								

\*\* Surrogates outside limits; data and surrogates confirmed by reanalysis

\*\*\* Poor recoveries due to dilution

Surrogate Recovery [D] = 100 \* A / B


	<b>ders :</b> 57020 #: 3035474	Sample: 570208-003 / SMP	Batc		: 212C-MD-0 : Soil					
U <b>nits:</b>	mg/kg	Date Analyzed: 12/09/17 12:34	SU	RROGATE R	ECOVERY S	STUDY				
	ВТЕХ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag			
1.4 D:flagar	1	Analytes	0.0267	0.0200		00.120				
1,4-Difluoro			0.0267	0.0300	<u>89</u> 95	80-120				
	#: 3035474	Sample: 570208-004 / SMP								
		L L								
Units:	mg/kg	Date Analyzed: 12/09/17 12:53	SURROGATE RECOVERY STUDY							
	ВТЕХ	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage			
1,4-Difluoro	benzene		0.0263	0.0300	88	80-120				
4-Bromoflu	orobenzene		0.0266	0.0300	89	80-120				
Lab Batch	#: 3035474	Sample: 570208-005 / SMP	Batc		: Soil					
Units:	mg/kg	Date Analyzed: 12/09/17 13:12	SU	RROGATE R		STUDY				
	втех	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag			
		Analytes			[D]					
1,4-Difluoro	obenzene		0.0276	0.0300	92	80-120				
4-Bromoflu	orobenzene		0.0293	0.0300	98	80-120				
Lab Batch	#: 3035474	Sample: 570208-006 / SMP	Batc	h: 1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 12/09/17 13:31	st	RROGATE R	ECOVERY S	STUDY				
	ВТЕХ	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag			
1,4-Difluoro	obenzene		0.0282	0.0300	94	80-120				
4-Bromoflu	orobenzene		0.0276	0.0300	92	80-120				
Lab Batch	#: 3035474	Sample: 570208-007 / SMP	Batc	h: 1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 12/09/17 13:50	st	RROGATE R	ECOVERY S	STUDY				
	BTEX by EPA 8021B Analytes			True Amount [B]	Recovery %R [D]	Control Limits %R	Flag			
1,4-Difluoro	benzene		0.0273	0.0300	91	80-120				
1,1 Diffuore										

\* 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



	<b>ders :</b> 57020 #: 3035474	8, Sample: 570208-008 / SMP	Batcl	-	: 212C-MD-0	01042				
Units:	mg/kg	Date Analyzed: 12/09/17 14:09	SURROGATE RECOVERY STUDY							
	BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluor	obenzene		0.0269	0.0300	90	80-120				
4-Bromoflu	orobenzene		0.0266	0.0300	89	80-120				
Lab Batch	#: 3035474	Sample: 570208-009 / SMP	Batcl	h: 1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 12/09/17 14:28	SU	RROGATE R	ECOVERY	STUDY				
	втех	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluor	obenzene		0.0269	0.0300	90	80-120				
4-Bromoflu	orobenzene		0.0271	0.0300	90	80-120				
Lab Batch	#: 3035474	Sample: 570208-010 / SMP	Batcl	h: 1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 12/09/17 14:47	SU	RROGATE R	ECOVERY	STUDY				
	BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluor	obenzene		0.0284	0.0300	95	80-120				
4-Bromoflu	orobenzene		0.0267	0.0300	89	80-120				
Lab Batch	#: 3035474	Sample: 570208-011 / SMP	Batcl							
Units:	mg/kg	Date Analyzed: 12/09/17 15:06	SU	RROGATE R	ECOVERYS	STUDY				
	втех	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluor	obenzene		0.0271	0.0300	90	80-120				
4-Bromoflu	orobenzene		0.0264	0.0300	88	80-120				
Lab Batch	#: 3035474	Sample: 570208-012 / SMP	Batcl	h: 1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 12/09/17 15:25	SU	RROGATE R	ECOVERY	STUDY				
	BTEX by EPA 8021B Analytes			True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
			0.0275	0.0200	02	00.120				
1,4-Difluor	obenzene		0.0275	0.0300	92	80-120				

\* 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



	<b>ders :</b> 57020 #: 3035491	8, Sample: 570208-013 / SMP	Batch		: 212C-MD-0 : Soil	)1042				
U <b>nits:</b>	mg/kg	Date Analyzed: 12/10/17 20:30	SU	RROGATE R	ECOVERY S	STUDY				
	втех	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluoro	hanzana	Analytes	0.0279	0.0300	93	80-120				
4-Bromoflu			0.0279	0.0300	89	80-120				
	#: 3035491	Sample: 570208-014 / SMP								
Units:	mg/kg	Date Analyzed: 12/10/17 20:49		RROGATE R		STUDY				
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluoro	obenzene	Analytes	0.0285	0.0300	95	80-120				
4-Bromoflue			0.0274	0.0300	91	80-120				
	#: 3035491	Sample: 570208-015 / SMP	Batch		-	00 120				
Units:	mg/kg	Date Analyzed: 12/10/17 21:07	SURROGATE RECOVERY STUDY							
	втех	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
		Analytes			[D]					
1,4-Difluoro	obenzene		0.0281	0.0300	94	80-120				
4-Bromoflue	orobenzene		0.0274	0.0300	91	80-120				
Lab Batch	<b>#:</b> 3035491	Sample: 570208-016 / SMP	Batch	n: 1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 12/10/17 21:26	SU	RROGATE R	ECOVERY S	STUDY				
	ВТЕХ	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluoro	obenzene		0.0284	0.0300	95	80-120				
4-Bromoflu	orobenzene		0.0281	0.0300	94	80-120				
Lab Batch	#: 3035491	Sample: 570208-017 / SMP	Batch	n: 1 Matrix	: Soil					
U <b>nits:</b>	mg/kg	Date Analyzed: 12/10/17 21:45	SU	RROGATE R	ECOVERY S	STUDY				
	BTEX by EPA 8021B Analytes			True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluoro	obenzene		0.0276	0.0300	92	80-120				

\* 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



Lab Batch	<b>ders :</b> 570208 #: 3035491	Sample: 570208-018 / SMP	Batc	h: 1 Matrix	. 5011						
U <b>nits:</b>	mg/kg	Date Analyzed: 12/10/17 22:04	SU	SURROGATE RECOVERY STUDY							
	BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag				
		Analytes			[D]						
1,4-Difluoro	obenzene		0.0265	0.0300	88	80-120					
4-Bromoflu	orobenzene		0.0246	0.0300	82	80-120					
Lab Batch	#: 3035197	Sample: 7635570-1-BLK / BI	LK Bate	h: 1 Matrix	: Solid						
Units:	mg/kg	Date Analyzed: 12/06/17 13:38	SU	RROGATE R	ECOVERY S	STUDY					
		By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage				
1-Chlorooct			97.7	100	98	70-135					
o-Terpheny	1		52.5	50.0	105	70-135					
Lab Batch	#: 3035310	Sample: 7635628-1-BLK / BI	LK Bate	h: 1 Matrix	: Solid						
Units:	mg/kg	Date Analyzed: 12/07/17 13:34	SU	RROGATE R	ECOVERY	STUDY					
	TPH I	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag				
		Analytes			[D]						
1-Chlorooct	ane		91.6	100	92	70-135					
o-Terpheny	l		48.9	50.0	98	70-135					
Lab Batch	#: 3035409	Sample: 7635691-1-BLK / BI	LK Batc	h: 1 Matrix	: Solid						
Units:	mg/kg	Date Analyzed: 12/08/17 19:46	SU	RROGATE R	ECOVERY S	STUDY					
	DØDS			_		Control	Flage				
	BTEX	A by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Limits %R					
1,4-Difluoro			Found	Amount	%R						
1,4-Difluoro 4-Bromofluo	benzene		Found [A]	Amount [B]	%R [D]	%R					
4-Bromoflu	benzene		Found [A] 0.0286 0.0265	Amount [B] 0.0300 0.0300	%R [D] 95 88	% <b>R</b> 80-120					
4-Bromoflu Lab Batch	obenzene	Analytes	Found [A] 0.0286 0.0265 LK Batc	Amount [B] 0.0300 0.0300	%R [D] 95 88 : Solid	%R 80-120 80-120					
4-Bromoflu	bbenzene probenzene #: 3035474 mg/kg BTEX	Analytes Sample: 7635697-1-BLK / BI Date Analyzed: 12/09/17 08:28 Sby EPA 8021B	Found [A] 0.0286 0.0265 LK Batc	Amount [B] 0.0300 0.0300 h: 1 Matrix	%R [D] 95 88 : Solid ECOVERY S Recovery %R	%R 80-120 80-120	Flag				
4-Bromoflu Lab Batch	obenzene probenzene #: 3035474 mg/kg BTEX	Analytes Sample: 7635697-1-BLK / BI Date Analyzed: 12/09/17 08:28	Found [A] 0.0286 0.0265 LK Batcl SU Amount Found	Amount [B] 0.0300 0.0300 h: 1 Matrix JRROGATE R True Amount	%R [D] 95 88 : Solid ECOVERY S Recovery	%R 80-120 80-120 STUDY Control Limits	Flag				

\* 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



Lab Batch	<b>#:</b> 3035491	Sample: 7635714-1-BLK / E	BLK Bate	h: 1 Matrix	: Solid					
U <b>nits:</b>	mg/kg	Date Analyzed: 12/10/17 19:52	SU	SURROGATE RECOVERY STUDY						
	BTEX	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage			
		Analytes			[D]					
1,4-Difluoro	obenzene		0.0274	0.0300	91	80-120				
4-Bromoflu	orobenzene		0.0244	0.0300	81	80-120				
Lab Batch	#: 3035197	Sample: 7635570-1-BKS / E	BKS Bate	h: 1 Matrix	: Solid					
Units:	mg/kg	Date Analyzed: 12/06/17 13:58	SURROGATE RECOVERY STUDY							
		By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage			
1-Chlorooct		Anarytes	90.8	100	91	70-135				
o-Terpheny			49.1	50.0	98	70-135				
	#: 3035310	Sample: 7635628-1-BKS / E				70-155				
Units:	mg/kg	Date Analyzed: 12/07/17 13:53		JRROGATE R	-					
e must			50	JRRUGATE R	LCOVERI					
TPH By SW8015 Mod			Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage			
		Analytes			[D]					
1-Chlorooct	ane		91.9	100	92	70-135				
o-Terpheny			49.7	50.0	99	70-135				
Lab Batch	#: 3035409	Sample: 7635691-1-BKS / E	BKS Bate	ch: 1 Matrix	: Solid					
Units:	mg/kg	Date Analyzed: 12/08/17 17:55	SU	JRROGATE R	ECOVERY S	STUDY				
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1.4-Difluor		Anaryus	0.0284	0.0300	95	80-120				
4-Bromoflu			0.0284	0.0300	93	80-120				
	#: 3035474	Sample: 7635697-1-BKS / E			: Solid	00 120				
Units:	mg/kg	Date Analyzed: 12/09/17 03:21		JRROGATE R		STUDY				
		X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag			
		Analytes			[D]					
1,4-Difluoro	obenzene		0.0276	0.0300	92	80-120				
4-Bromoflu	Bromofluorobenzene			0.0300	95	80-120				

\* 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



[]m:ta:	ma a /l	Data Anal 1. 10/10/17 17.05							
Units:	mg/kg	Date Analyzed: 12/10/17 17:05	SU	JRROGATE R	ECOVERY S	STUDY			
	ВТЕХ	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
		Analytes			[D]				
1,4-Difluorobe	nzene		0.0283	0.0300	94	80-120			
4-Bromofluoro	benzene		0.0278	0.0300	93	80-120			
Lab Batch #:	3035197	Sample: 7635570-1-BSD / 1	BSD Bate	h: 1 Matrix	: Solid				
Units:	mg/kg	Date Analyzed: 12/06/17 14:19	SURROGATE RECOVERY STUDY						
		By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chlorooctan		Analytes	82.5	100	83	70-135			
o-Terphenyl			45.2	50.0	90	70-135			
Lab Batch #:	3035310	Sample: 7635628-1-BSD / 1				10 155			
Units:	mg/kg	Date Analyzed: 12/07/17 14:13		JRROGATE R		STUDY			
	TPH F	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
		Analytes	[A]		[D]	701			
1-Chlorooctan	2		92.4	100	92	70-135			
o-Terphenyl			48.6	50.0	97	70-135			
Lab Batch #:	3035409	Sample: 7635691-1-BSD / 1	BSD Bate	h: 1 Matrix	: Solid				
Units:	mg/kg	Date Analyzed: 12/08/17 18:12	SU	JRROGATE R	ECOVERY S	STUDY			
		A by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1,4-Difluorobe			0.0260	0.0300	87	80-120			
4-Bromofluoro	benzene		0.0263	0.0300	88	80-120			
Lab Batch #:		Sample: 7635697-1-BSD / 1			: Solid				
Units:	mg/kg	Date Analyzed: 12/09/17 03:40	SU	JRROGATE R	ECOVERY S	STUDY			
	BTEX by EPA 8021B			True Amount [B]	Recovery %R	Control Limits %R	Flage		
	Analytes				[D]				
1,4-Difluorobenzene			0.0283	0.0300	94	80-120			
	Bromofluorobenzene								

\* 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



Lab Batch #	lers: 57020 : 3035491	Sample: 7635714-1-BSD / BS	D Batch		: 212C-MD-0 : Solid					
Units:	mg/kg	Date Analyzed: 12/10/17 17:22		RROGATE R	ECOVERY S	STUDY				
	втех	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1.4-Difluorol	enzene		0.0284	0.0300	95	80-120				
4-Bromofluo	obenzene		0.0294	0.0300	98	80-120				
Lab Batch #	: 3035197	Sample: 570089-025 S / MS								
Units:	mg/kg	Date Analyzed: 12/06/17 14:58	SURROGATE RECOVERY STUDY							
	TPH I	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chloroocta	ne	Anarytes	89.1	99.9	89	70-135				
o-Terphenyl			46.6	50.0	93	70-135				
Lab Batch #	: 3035310	Sample: 570208-016 S / MS	Batch			10 155				
Units:	mg/kg	Date Analyzed: 12/07/17 14:54	SURROGATE RECOVERY STUDY							
	TPH I	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage			
		Analytes			[D]					
1-Chloroocta	ne		88.2	99.9	88	70-135				
o-Terphenyl			43.7	50.0	87	70-135				
Lab Batch #	: 3035409	Sample: 570089-005 S / MS	Batch	n: 1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 12/08/17 18:31	SU	RROGATE R	ECOVERY S	STUDY				
	BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluorol	enzene		0.0323	0.0300	108	80-120				
4-Bromofluo	obenzene		0.0345	0.0300	115	80-120				
Lab Batch #	: 3035474	Sample: 570416-001 S / MS	Batch	n: 1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 12/09/17 03:59	SU	RROGATE R	ECOVERY S	STUDY				
	BTEX by EPA 8021B Analytes			True Amount [B]	Recovery %R [D]	Control Limits %R	Flage			
1,4-Difluorol	enzene		0.0316	0.0300	105	80-120				
	-Bromofluorobenzene				1					

\* 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



Units:	mg/kg	<b>Date Analyzed:</b> 12/10/17 18:17	CT	JRROGATE R	FCOVEDV	STUDY	
emus.	ing/kg	Duce mary2ett. 12/10/17/10.17	50	KROGATE R	LUVERY		
	BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	obenzene		0.0298	0.0300	99	80-120	
4-Bromoflu	orobenzene		0.0301	0.0300	100	80-120	
Lab Batch	#: 3035197	Sample: 570089-025 SD / M	SD Batc	h: 1 Matrix	: Soil	1 1	
Units:	mg/kg	Date Analyzed: 12/06/17 15:18	SU	JRROGATE R	RECOVERY	STUDY	
	TPH I	3y SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	ane	Analytes	96.6	100	97	70-135	
o-Terpheny			50.0	50.0	100	70-135	
1 2	#: 3035310	Sample: 570208-016 SD / M				10 155	
Units:	mg/kg	<b>Date Analyzed:</b> 12/07/17 15:13		JRROGATE R		STUDY	
	TPH I	3y SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage
		Analytes	[23]		[D]	/01	
1-Chlorooct	tane		91.4	99.8	92	70-135	
o-Terpheny	1		47.7	49.9	96	70-135	
Lab Batch	#: 3035409	Sample: 570089-005 SD / M	SD Batc	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 12/08/17 18:50	SU	JRROGATE R	RECOVERY	STUDY	
	ВТЕХ	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluor	obenzene		0.0289	0.0300	96	80-120	
4-Bromoflu	orobenzene		0.0292	0.0300	97	80-120	
	#: 3035474	Sample: 570416-001 SD / M	SD Batc	h: 1 Matrix	: Soil	1	<u> </u>
Lab Batch	mg/kg	Date Analyzed: 12/09/17 04:18	SU	JRROGATE R	RECOVERY	STUDY	
	6 6	BTEX by EPA 8021B				Control	
		•	Amount Found [A]	True Amount [B]	Recovery %R	Limits %R	Flag
Lab Batch Units:	BTEX	X by EPA 8021B Analytes	Found	Amount	•	Limits	Flage

\* 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



Work Orders : 57020 Lab Batch #: 3035491	8, Sample: 570416-007 SD / M	MSD Batch: 1 Matrix: Soil							
Units: mg/kg	Date Analyzed: 12/10/17 18:36	SURROGATE RECOVERY STUDY							
BTEX	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1,4-Difluorobenzene		0.0306	0.0300	102	80-120				
4-Bromofluorobenzene	0.0318	0.0300	106	80-120					

\* 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





### Project Name: Chil Parlor 17 Federal #3H Transfer Line

Work Order	#: 570208							Proj	ject ID:	212C-MD-(	01042	
Analyst:	ALJ	D	ate Prepar	red: 12/08/201	17			Date A	nalyzed:	12/08/2017		
Lab Batch ID:	<b>Sample:</b> 7635691-	1-BKS	Bate	<b>h #:</b> 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK	SPIKE / 1	BLANK SPIKE DUPLICATE RECOVERY STUDY						
Analy	BTEX by EPA 8021B	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
Benzene		<0.00200	0.0998	0.109	109	0.100	0.120	120	10	70-130	35	
Toluene		< 0.00200	0.0998	0.104	104	0.100	0.117	117	12	70-130	35	
Ethylbenze	ene	< 0.00200	0.0998	0.103	103	0.100	0.115	115	11	71-129	35	
m,p-Xylen	es	< 0.00399	0.200	0.198	99	0.200	0.221	111	11	70-135	35	
o-Xylene		< 0.00200	0.0998	0.0966	97	0.100	0.108	108	11	71-133	35	
Analyst:	ALJ	D	ate Prepar	red: 12/09/201	17			Date A	nalyzed:	12/09/2017		
Lab Batch ID:	<b>:</b> 3035474 <b>Sample:</b> 7635697-	1-BKS	Batc	<b>h #:</b> 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUPLICATE RECOVERY STUDY					
Analy	BTEX by EPA 8021B	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
Benzene		< 0.00199	0.0996	0.104	104	0.100	0.0988	99	5	70-130	35	
Toluene		< 0.00199	0.0996	0.0999	100	0.100	0.0944	94	6	70-130	35	
Ethylbenze	ene	<0.00199	0.0996	0.0996	100	0.100	0.0942	94	6	71-129	35	
m,p-Xylen	les	< 0.00398	0.199	0.191	96	0.201	0.181	90	5	70-135	35	
o-Xylene		< 0.00199	0.0996	0.0945	95	0.100	0.0890	89	6	71-133	35	





### Project Name: Chil Parlor 17 Federal #3H Transfer Line

Work Order	r #: 570208							Pro	ject ID:	212C-MD-0	01042	
Analyst:	ALJ	D	ate Prepar	red: 12/10/202	17			Date A	nalyzed:	12/10/2017		
Lab Batch ID	<b>Sample:</b> 7635714-1	-BKS	Bate	<b>h #:</b> 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK	SPIKE / 1	/ BLANK SPIKE DUPLICATE RECOVERY STUDY						
	BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analy	ytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Benzene		< 0.00200	0.0998	0.105	105	0.100	0.109	109	4	70-130	35	
Toluene		< 0.00200	0.0998	0.0993	99	0.100	0.103	103	4	70-130	35	
Ethylbenz	zene	< 0.00200	0.0998	0.0991	99	0.100	0.104	104	5	71-129	35	
m,p-Xyler	nes	< 0.00399	0.200	0.190	95	0.201	0.200	100	5	70-135	35	
o-Xylene		< 0.00200	0.0998	0.0943	94	0.100	0.0992	99	5	71-133	35	
Analyst:	MNV	D	ate Prepar	red: 12/07/20	17	<b>Date Analyzed:</b> 12/07/2017						
Lab Batch ID	<b>Sample:</b> 7635619-1	-BKS	Bate	<b>h #:</b> 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
Inorg	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	
Chloride		<5.00	250	247	99	250	249	100	1	90-110	20	





### Project Name: Chil Parlor 17 Federal #3H Transfer Line

Work Order	r#: 570208								Pro	ject ID: 2	212C-MD-(	)1042		
Analyst:	ARM		D	ate Prepar	red: 12/06/201	17			Date A	nalyzed:	2/06/2017			
Lab Batch ID	: 3035197	Sample: 7635570-1-	-BKS Batch #: 1				Matrix: Solid							
Units:	mg/kg			BLANK /BLANK SPIKE /				E / BLANK SPIKE DUPLICATE RECOVERY STUDY						
	TPH By SW8015	Mod	BlankSpikeBlankBlankSample ResultAddedSpikeSpike[A]Result%R					Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag	
Analy	ytes			[ <b>B</b> ]	[C]	[D]	[E]	Result [F]	[G]					
Gasoline	Range Hydrocarbons (GRO	)	<15.0	1000	953	95	1000	855	86	11	70-135	35		
Diesel Ra	inge Organics (DRO)		<15.0	1000	1020	102	1000	933	93	9	70-135	35		
Analyst:	ARM		D	ate Prepar	red: 12/07/201	17	<b>Date Analyzed:</b> 12/07/2017							
Lab Batch ID	: 3035310	Sample: 7635628-1-	BKS	Bate	<b>h #:</b> 1		Matrix: Solid							
Units:	mg/kg			BLAN	K /BLANK	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUE	γ		
Analy	TPH By SW8015	Mod	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	
	Range Hydrocarbons (GRO	)	<15.0	1000	980	98	1000	986	99	1	70-135	35		
	inge Organics (DRO)	·	<15.0	1000	1010	101	1000	1040	104	3	70-135	35		





#### Project Name: Chil Parlor 17 Federal #3H Transfer Line

<b>Work Order # :</b> 570208						Project II	<b>):</b> 212C-N	MD-01042	2		
Lab Batch ID: 3035409	QC- Sample ID:	570089	-005 S	Ba	tch #:	1 Matrix	<b>k:</b> Soil				
<b>Date Analyzed:</b> 12/08/2017	Date Prepared:	12/08/2	017	An	alyst: A	ALJ					
Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
BTEX by EPA 8021B	Parent Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]	[C]	<sup>7</sup> 6K [D]	Added [E]	Kesut [F]	56K [G]	70	70K	70KFD	
Benzene	<0.00200	0.100	0.0854	85	0.101	0.0915	91	7	70-130	35	
Toluene	<0.00200	0.100	0.0805	81	0.101	0.0851	84	6	70-130	35	
Ethylbenzene	< 0.00200	0.100	0.0786	79	0.101	0.0810	80	3	71-129	35	
m,p-Xylenes	<0.00401	0.200	0.152	76	0.201	0.155	77	2	70-135	35	
o-Xylene	< 0.00200	0.100	0.0777	78	0.101	0.0777	77	0	71-133	35	
Lab Batch ID: 3035474	QC- Sample ID:	570416	-001 S	Ba	tch #:	1 Matrix	<b>k:</b> Soil				
<b>Date Analyzed:</b> 12/09/2017	Date Prepared:	12/09/2	017	An	alyst: A	ALJ					
<b>Reporting Units:</b> mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
BTEX by EPA 8021B 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
Benzene	< 0.00199	0.0994	0.102	103	0.0996	0.102	102	0	70-130	35	
Toluene	<0.00199	0.0994	0.0891	90	0.0996	0.0832	84	7	70-130	35	
Ethylbenzene	<0.00199	0.0994	0.0819	82	0.0996	0.0732	73	11	71-129	35	
m,p-Xylenes	< 0.00398	0.199	0.153	77	0.199	0.135	68	13	70-135	35	Х
					0.1//						

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.





### Project Name: Chil Parlor 17 Federal #3H Transfer Line

<b>Work Order # :</b> 570208						Project II	<b>):</b> 212C-1	MD-01042	2		
Lab Batch ID: 3035491	QC- Sample ID:	570416	-007 S	Ba	tch #:	1 Matrix	k: Soil				
<b>Date Analyzed:</b> 12/10/2017	Date Prepared:	12/10/2	017	An	alyst: A	ALJ					
<b>Reporting Units:</b> mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
BTEX by EPA 8021B	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes	[A]	[B]	[0]	[D]	[E]	[-]	[G]				
Benzene	<0.00200	0.100	0.0923	92	0.101	0.0934	92	1	70-130	35	
Toluene	< 0.00200	0.100	0.0803	80	0.101	0.0787	78	2	70-130	35	
Ethylbenzene	< 0.00200	0.100	0.0801	80	0.101	0.0711	70	12	71-129	35	X
m,p-Xylenes	< 0.00401	0.200	0.147	74	0.201	0.139	69	6	70-135	35	X
o-Xylene	< 0.00200	0.100	0.0737	74	0.101	0.0639	63	14	71-133	35	Х
Lab Batch ID: 3035317	QC- Sample ID:	566199	-020 S	Ba	tch #:	1 Matrix	<b>k:</b> Soil				
<b>Date Analyzed:</b> 12/07/2017	Date Prepared:	12/07/2	017	An	alyst: N	MNV					
Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Inorganic Anions by EPA 300/300.1	Parent Sample Result	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride	52.0	248	301	100	248	305	102	1	90-110	20	
Lab Batch ID: 3035317	QC- Sample ID:	570208	-010 S	Ba	tch #:	1 Matrix	k: Soil				
<b>Date Analyzed:</b> 12/07/2017	Date Prepared:	12/07/2	017	An	alyst: N	MNV					
Reporting Units: mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
			Spiked Sample	Spiked		Duplicate	Spiked		Control	Control	
Inorganic Anions by EPA 300/300.1	Parent Sample Result	Spike Added	Result [C]	Sample %R	Spike Added	Spiked Sample Result [F]	Dup. %R	RPD %	Limits %R	Limits %RPD	Flag
Inorganic Anions by EPA 300/300.1 Analytes	Sample		Result	Sample							Flag

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.





#### Project Name: Chil Parlor 17 Federal #3H Transfer Line

Work Order # :	570208						Project II	<b>D:</b> 212C-1	MD-01042	2		
Lab Batch ID:	3035197	QC- Sample ID:	570089-	025 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	12/06/2017	Date Prepared:	12/06/20	017	An	alyst: A	ARM					
<b>Reporting Units:</b>	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
ſ	FPH By SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Gasoline Range	Hydrocarbons (GRO)	<15.0	999	963	96	1000	1060	106	10	70-135	35	
Diesel Range Or	rganics (DRO)	<15.0	999	1050	105	1000	1130	113	7	70-135	35	
Lab Batch ID:	3035310	QC- Sample ID:	570208-	016 S	Ba	tch #:	1 Matri	x: Soil				
Date Analyzed:	12/07/2017	Date Prepared:	12/07/20	017	An	alyst: A	ARM					
<b>Reporting Units:</b>	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Г	ГРН By SW8015 Mod	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]		[D]	[E]	Kesult [F]	[G]	70	701		
Gasoline Range	Hydrocarbons (GRO)	<15.0	999	956	96	998	1030	103	7	70-135	35	
Diesel Range Or	rganics (DRO)	<15.0	999	1000	100	998	1080	108	8	70-135	35	

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

Relinquished by: elinquished by: Analysis Request of Chain of Custody Record elinquished by: state) eceiving Laboratory roject Name; lient Name: voice to: LAB USE oject Location: LAB # 井 AH#8 (0-6") 2'BEB AH#2 (0-3") 2'BEB AH#10 (0-3") 2'BEB AH#9 (0-3") 2'BEB AH#7 (0-3") 2'BEB AH#4 (0-3") 2'BEB AH#3 (0-6") 2'BEB AH#6 (0-6") 2'BEB AH#5 (0-3") 2'BEB AH#1 (0-6") 2'BEB (county, Lea County, New Mexico CAVA Xenco Chil Parlor 17 Federal #3H Transfer Line Marathon **Fetra Tech. Inc.** SAMPLE IDENTIFICATION ech. Date: Date: Date Time lime Ime A ORIGINAL COPY Received by: Received by Sampler Signature Project #: Site Manager: eived by: 11/30/2017 11/30/2017 11/30/2017 11/30/2017 11/30/2017 11/30/2017 11/30/2017 11/30/2017 11/30/2017 1/30/2017 DATE SAMPLING Date: Date: Date 3 P Time: lime Ime د TIME WATER Ike Tavarez MATRIX  $\times \times \times \times$ × × × × × 4000 N Big Spring Street, Ste 401 Midland,Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946 × SOIL Mike Carmona 212C-MD-01042 HCL PRESERVATIVE HNO<sub>3</sub> × × × × × × × × ICE × None # CONTAINERS FILTERED (Y/N) 6 ナナ 6-6 XX -6 BTEX 8260B BTEX 8021B) ample Temperature ircle) HAND DELIVERED FEDEX UPS Tracking #: LAB USE ONLY TPH TX1005 (Ext to C35) TPH 8015MC GRO - DRO - ORO - MRO) 4-1 + 1 K 1 PAH 8270C (Circle or Specify Method No.) Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles REMARKS: ANALYSIS REQUEST RUSH: Same Day 24 hr 48 hr TCLP Semi Volatiles Special Report Limits or TRRP Report Rush Charges Authorized RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 208 PCB's 8082 / 608 NORM Page PLM (Asbestos) Standard 4 44 14 4 Chloride \* Chloride Sodium TDS General Water Chemistry (see attached list) Anion/Cation Balance 72 hr Conductivity of HOLD

Temp:

R

IR ID:R-8

CF:(0-6: -0.2°C)

Corrected Temp: (, ()

(6-23: +0.2°C

Final 1.000

Iterra Tech, Inc.         Narathon         Ste Manager         Ite           Chill Parlor 17 Federal #3H Transfer Line         Forgert#         Ite         Ite           Chill Parlor 17 Federal #3H Transfer Line         Sampler Signature         Ite         Ite           Tech County, New Mexico         Sampler Signature         Sampler Signature         Ite         Ite           Tech County, New Mexico         Sampler Signature         Sampler Signature         Ite         Ite         Ite           Tech County, New Mexico         Sampler Signature         Sampler Signature         Sampler Signature         Ite	Image: Marathon         Ste Annage: Image: Imag	(Circle) HAND DELIVERED
Itetra Tech, Inc.       Marathon     Ste Manager:       Chil Parlor 17 Federal #3H Transfer Line       Recommy, Lea County, New Mexico       Tackra Tackr       Sample: IDENTIFICATION       Sample: IDENTIFICATION       Net#11 (0-37) ZBEB       At##1 (0-37) ZBEB       At##1 (0-37) ZBEB       Intervation       Tackra Tackr       Intervation       Net#1 (0-37) ZBEB       Object       Time:       Date:       Time:       Object       Date:       Time:       Object       Date:       Time:	Tetra Tech, Inc.           Marathon         Numaration           Chil Parlor 17 Federal #3H Transfer Line         Project#           Chil Parlor 17 Federal #3H Transfer Line         Numper Signature           Tatva Tatok         Sumpler Signature           Tatva Tatok         Sumpler Signature           Xenco         Sampler Denvirie         Numper Signature           Tatva Tatok         Sumpler Signature         Numper Signature           Sampler Denvirie         Sampler Signature         Numper Signature           At##11 (0-57) 2BEB         11/20/2017         Empler Signature         Numper Signature           At##13 (0-57) 2BEB         11/20/2017         Empler Signature         Numper Signature           At##14 (0-67) 2BEB         11/20/2017         Empler Signature         Numper Signature           Oble         Time:         Solution         Solution         Numper Signature           Oble         Time:         Solution         Solution         Numper Signature         Numper Signature           At##16 (0-67) 2BEB         11/20/2017         Imple Signature         Numper Signature         Numper Signature         Numper Signature           Oble         Time:         Solution         Solution         Nume         Numper Signature <t< th=""><th></th></t<>	
Itetra Tech, Inc.         Narathon         Site Manager.         Namager.         Namager	Tetra Tech, Inc.           Marathon         Sile Monager:         Ik           Chil Parlor 17 Federal #3H Transfer Line         Iv         Sampler Signature:         Iv           Tetra County, New Mexico         Protect.         Iv         Iv         Iv           Tetra County, New Mexico         Protect.         Iv         Iv         Iv         Iv           Tetra County, New Mexico         Sampler Signature:         Iv         <	Sample Temperature
Marathon     Ster       Chil Parlor 17 Federal #3H Transfer Line     Project #2       Roumy, Lea County, New Mexico     Project #2       Table A County, New Mexico     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Itable A County Internation       Market 1 (0-3) 2/BEB     11/30/2017       At##13 (0-3) 2/BEB     11/30/2017       At##14 (0-6) 2/BEB     11/30/2017       At##15 (0-6) 2/BEB     11/30/2017       At##16 (0-3) 2/BEB     11/30/2017	Tetra Tech, Inc.           Marathon         Ste Manager:         It           Chil Parlor 17 Federal #3H Transfer Line         Project #2         It           County, Lea County, New Mexico         Project #2         Sampler Signature:         It           Tack A Tack         Sampler Signature:         It         It         It           Tack A Tack         Sampler Signature:         It         It         It           Xenco         Visce         Sampler Signature:         It         It           Xenco         Sampler Signature:         It         It         It         It           Xenco         Sampler Signature:         It         I	LAB USE ONLY
Marathon         Site Manager:         It           Chill Parlor 17 Federal #3H Transfer Line         Frojeci #:         It           renny, Lea County, New Mexico         Projeci #:         It           Tatha         Tatha         Sampler Signature:         It           Xenco         Sampler Signature:         It         It           Xenco         Sampler Signature:         It         It           11 (0-3') 2BEB         11/30/2017         It         It           13 (0-3') 2BEB         11/30/2017         It         It           14 (0-6') 2BEB         11/30/2017         It         It           16 (0-6') 2BEB         11/30/2017         It         It           18 (0-3') 2BEB         11/30/2017         It         It	Tetra Tech. Inc.           Marathon         Site Manager:         It           Chil Parlor 17 Federal #3H Transfer Line         Project #:         It           County. New Mexico         Project #:         It           Tack T Tack         Sampler Signature:         It           Xenco         Sampler Signature:         It           Xenco         Sampler Signature:         It           11 (0-37) 2BEB         11/30/2017         It           13 (0-37) 2BEB         11/30/2017         It           14 (0-67) 2BEB         11/30/2017         It           16 (0-67) 2BEB         11/30/2017         It           18 (0-37) 2BEB         11/30/2017         It           18 (0-37) 2BEB         11/30/2017         It	
Marathon         Site Manager:         It           Chil Parlor 17 Federal #3H Transfer Line         Project #:         It           rewmy, Lea County, New Mexico         Sampler Signature:         It           Zenco         Sampler Signature:         It           Xenco         It         It/30/2017         It           11 (0-5') 2'BEB         11/30/2017         It         It           12 (0-5') 2'BEB         11/30/2017         It         It           13 (0-5') 2'BEB         11/30/2017         It         It           14 (0-5') 2'BEB         11/30/2017         It         It           16 (0-5') 2'BEB         11/30/2017         It         It           17 (0-5') 2'BEB         11/30/2017         It         It	Tetra Tech, Inc.           Marathon         Site Manager.         Ite           Chil Parlor 17 Federal #3H Transfer Line         Project #:         Ite           County, New Mexico         Project #:         Ite           T2-C/CA         T2-C/CA         Sampler Signature:         Ite           Xenco         Sampler Signature:         Ite         Ite         Ite           Xenco         Sampler Signature:         Ite         Ite         Ite         Ite           11 (0-37) 2/BEB         T2-C/CA         Sampler Signature:         Ite	X 1 4
Marathon         Ste Manager:         Ite           Chil Parlor 17 Federal #3H Transfer Line         Project #:         Ite           County, New Mexico         Project #:         Ite           Tettra Tedural #3H Transfer Line         Sampler Signature:         Ite           Xenco         Sampler Signature:         Ite           Xenco         Sampler Signature:         Ite           Xenco         Sampler Signature:         Ite           Xenco         Sampler Signature:         Ite           YEAR:         Sampler Signature:         Ite           YEAR:         Sample IDENTIFICATION         YEAR:         Ite           11 (0-37) 2BEB         It1/30/2017         Ite         Ite           12 (0-37) 2BEB         It1/30/2017         Ite         Ite           12 (0-67) 2BEB         It1/30/2017         Ite         Ite           14 (0-67) 2BEB         It1/30/2017         Ite         Ite           16 (0-67) 2BEB         It/30/2017         Ite         Ite	Tetra Tech. Inc.           Marathon         Site Manager:         Ik           Chill Parlor 17 Federal #3H Transfer Line         Project #:         Ik           County, New Mexico         Project #:         Ik           Tetra Tetra         Sampler Signature:         Ik           Xenco         It         Sampler Signature:         Ik           Xenco         It         Sampler Signature:         Ik           Xenco         It         Ik         Ik           Stock:         It         Ik         Ik           Solographic         It         Ik         Ik	-1
If etra Tech, Inc.     Site Manager:     Ik       Marathon     Site Manager:     Ik       Chil Parlor 17 Federal #3H Transfer Line     Project #:     Ik       County, New Mexico     Project #:     Ik       Tech:     Tech:     Sampler Signature:     Ik       Xenco     Sampler Signature:     Ik     Ik       Xenco     Sampler Signature:     Ik     Ik       11 (0-37) 216EB     Sampler Signature:     Ik     Ik       12 (0-37) 216EB     It     It     It       12 (0-37) 216EB     It     It     It       12 (0-37) 216EB     It     It     It       13 (0-37) 216EB     It     It     It       14 (0-67) 218EB     It     It     It       15 (0-67) 218EB     It     It     It       14 (0-67) 218EB     It     It     It       15 (0-67) 218EB     It     It     It	Tetra Tech, Inc.       Marathon     Site Manager:       Marathon     Site Manager:       Chill Parlor 17 Federal #3H Transfer Line     Image: Chill Parlor 17 Federal #3H Transfer Line       Tetra Tedral #3H Transfer Line       Tetra Tedra       Tetra Tedra     Sample signature:       Tetra Tetra Tetra     Sample signature:       Xenco     Sample Signature:       Yester     Sample Signature:       Yester     Sample Signature:       Yester     Tetra       12 (0-37) 2'BEB     Tit Sol 2017       13 (0-37) 2'BEB     Tit Sol 2017       14 (0-6') 2'BEB     Tit Sol 2017       15 (0-6') 2'BEB     Tit Sol 2017       16 (0-6') 2'BEB     Tit Sol 2017	
Marathon     Site Manager:       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line     Inc.       County, New Mexico     Project #:       Tation     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Sampler Signature:       11 (0-3') 2'BEB     Tation       12 (0-3') 2'BEB     Time       13 (0-3') 2'BEB     Time       11 (130/2017     Time       11 (130/2017     Time	Tetra Tech, Inc.       Marathon     Site Manager:     Ik       Chil Parlor 17 Federal #3H Transfer Line     Protect #:     Ik       County, Lea County, New Mexico     Protect #:     Ik       Tatra Tatra Tatra     Sampler Signature:     Ik       Xenco     Sampler Signature:     Ik       Xenco     Intion (0.37) 27BEB     Ik       11 (0-37) 27BEB     Ik     Ik       12 (0-37) 27BEB     Ik     Ik       13 (0-37) 27BEB     Ik     Ik       14 (0-67) 27BEB     Ik     Ik	
Iterra Tech, Inc.     Site Manager:     Ite Manager:       Marathon     Site Manager:     Ite Manager:       Chil Parlor 17 Federal #3H Transfer Line     Project #:     Ite       County, New Mexico     Project #:     Ite       Techar Techar     Sampler Signature:     Ite       Xenco     Ite     Ite       SAMPLE IDENTIFICATION     Ite     Ite       11 (0-3'') 2'BEB     Ite     Ite       12 (0-3'') 2'BEB     Ite     Ite     Ite       13 (0-3'') 2'BEB     Ite     Ite     Ite       13 (0-3'') 2'BEB     Ite     Ite     Ite	Tetra Tech, Inc.       Marathon     Site Manager:       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line     Project #:       County, New Mexico     Project #:       Techtra Techt     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Sampler Signature:       11 (0-37) 2'BEB     E       13 (0-37) 2'BEB     Ti //30/2017       13 (0-37) 2'BEB     Ti //30/2017	<u> </u>
Marathon     Site Manager:       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line     Froject #:       County, New Mexico     Project #:       TEXA TE OL     Sampler Signature:       Xenco     TE       Sampler Signature:     Sampler Signature:       Xenco     TE       Sampler Signature:     Sampler Signature:       Xenco     TE       Sampler Signature:     Sampler Signature:       Xenco     TE	Tetra Tech, Inc.       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line     Inc.       County, New Mexico     Project #:       Tetra Tech     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Int (0.37) 2/8EB       11 (0.37) 2/8EB     Tit (30/2017)       12 (0.37) 2/8EB     Tit (30/2017)	
Marathon     Site Manager:       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line       County, New Mexico       Tack A Tack       Tack A Tack       Xenco       Sampler Signature:       Xenco       Sampler Signature:       And County, New Mexico       Tack A Tack       Sampler Signature:       Xenco       Sampler Signature:       And County, New Tack       In (0-27) 2'BEB       11 (0-27) 2'BEB       11 (10-27) 2'BEB	Tetra Tech, Inc.       Marathon     Site Manager:       Marathon     Site Manager:       Chill Parlor 17 Federal #3H Transfer Line     Froject #:       County, New Mexico     Froject #:       Techar Techar Techar     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Sampler Signature:       Xenco     Interview       Sampler Signature:     Marathon       Xenco     Sampler Signature:       Xenco     Interview       Sampler Signature:     Marathon       Xenco     Interview       Sampler Signature:     Interview       Xenco     Interview       Sampler Signature:     Interview       Xenco     Interview       Interview     Interview	
Marathon     Site Manager:       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line       Icounty, New Mexico       Tetta Tecta       Tetta Tecta       Xenco       Sampler Signature:       Xenco       Sampler Signature:       DA	Tetra Tech, Inc.       Marathon     Site Manager:       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line     Image:       County, New Mexico     Project #:       Tech:     Tech:       Xenco     Sampler Signature:       Xenco     Sampler Signature:       DATE     Image:       DATE     Image:	X + F 08
Marathon     Site Manager:       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line       Icounty, Lea County, New Mexico       Tatka Tack       Tatka Tack       Xenco       Sampler Signature:       Xenco	Tetra Tech, Inc.       Marathon     Site Manager:       Marathon     Site Manager:       Chill Parlor 17 Federal #3H Transfer Line     IK       County, New Mexico     Project #:       Tetra Tetra     IK       Tetra Tetra     Sampler Signature:       Xenco     Sampler Signature:       Xenco     VEAR:	HCL INO <sub>3</sub> CE Ione CONTAINI LTERED ( CEX 8021B PH TX1005
Ietra Tech, Inc.       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line       Icounty, Lea County, New Mexico       Tetra Tech       Tetra Tech       Xenco   Sampler Signature:	Tetra Tech, Inc.         Marathon       Site Manager:       IK         Chil Parlor 17 Federal #3H Transfer Line       IK       IK         (county, New Mexico       Project #:       IK         Tetra Tech       Sampler Signature:       Xenco	METHOD ERS
Ietra Tech, Inc.       Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line     Ik       Lea County, New Mexico     Project #:       Techna Techna     Project #:	Tetra Tech, Inc.         Narathon       Site Manager:         Marathon       Site Manager:         Chil Parlor 17 Federal #3H Transfer Line         (county, New Mexico       Project #:         Tetra Tetra	
Ietra Tech, Inc.       ne:     Marathon       Chil Parlor 17 Federal #3H Transfer Line       atton:     (county, Lea County, New Mexico   Project #:	Image:       Marathon       Site Manager:       Ik         me:       Chil Parlor 17 Federal #3H Transfer Line       Site Manager:       Ik         ation:       (county, New Mexico       Project #:       Ik	
Ietra Tech, Inc.       Marathon     Site Manager:       Marathon     Ik       Chil Parlor 17 Federal #3H Transfer Line     Ik	Marathon     Site Manager:       Chil Parlor 17 Federal #3H Transfer Line	212C-MD-01042
Marathon Site Manager: Ik	Marathon Chil Parlor 17 Federal #34 Transfort in Ik	
Marathon Site Manager:	Bernard Custody Record	e lavarez
Jetra Tech, Inc.	E) Tetra Tech. Inc.	
		4000 N. Big Spring Street, Ste 401 MultimnTrexes 79705 Tel (432) 682-4559 Fax (432) 682-3946

Page 29 of 30

Temp: \, 2 IR ID:R-CF:(0-6: -0.2°C) (6-23: +0.2°C) Corrected Temp: \, ()

IR ID:R-8

Final 1.000



# **XENCO** Laboratories



ATORIES Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland	Acceptable Temperature Range: 0 - 6 degC								
Date/ Time Received: 12/05/2017 03:37:00 PM	Air and Metal samples Acceptable Range: Ambient								
Work Order #: 570208	Temperature Measuring device used : R8								
Sample Recei	pt Checklist Comments								
#1 *Temperature of cooler(s)?	1								
#2 *Shipping container in good condition?	Yes								
#3 *Samples received on ice?	Yes								
#4 *Custody Seals intact on shipping container/ cooler?	No								
#5 Custody Seals intact on sample bottles?	N/A								
#6*Custody Seals Signed and dated?	N/A								
#7 *Chain of Custody present?	Yes								
#8 Any missing/extra samples?	No								
#9 Chain of Custody signed when relinquished/ received?	Yes								
#10 Chain of Custody agrees with sample labels/matrix?	Yes								
#11 Container label(s) legible and intact?	Yes								
#12 Samples in proper container/ bottle?	Yes								
#13 Samples properly preserved?	Yes								
#14 Sample container(s) intact?	Yes								
#15 Sufficient sample amount for indicated test(s)?	Yes								
#16 All samples received within hold time?	Yes								
#17 Subcontract of sample(s)?	No								
#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: Shawnee Smith

Date: 12/05/2017

Checklist reviewed by: MucKic

Date: 12/11/2017

# Analytical Report 573370

for Tetra Tech- Midland

**Project Manager: Ike Tavarez** 

Chili Parlor 17 Federal #3H Transfer Line

#### 15-JAN-18

Collected By: Client





### 1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12) Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757) Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



15-JAN-18

SUP ACCREDIES

Project Manager: **Ike Tavarez Tetra Tech- Midland** 4000 N. Big Spring Suite 401 Midland, TX 79705

#### Reference: XENCO Report No(s): **573370** Chili Parlor 17 Federal #3H Transfer Line Project Address: Lea County,New Mexico

#### Ike Tavarez:

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) 573370. 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. 573370 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,

le p

Mike Kimmel Client Services Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



### Sample Id

AH #2B Bottomhole (3'BEB)
AH #2B North Sidewall (3'BEB)
AH #2B South Sidewall (3'BEB)
AH #2B East Sidewall (3'BEB)
AH #2B West Sidewall (3'BEB)
AH #12B Bottomhole (2.5BEB)
AH #12B NorthSidewall (2.5'BEB)
AH #12B Southsidwall (2.5'BEB)
AH #12B East Sidewall (2.5 BEB)
AH #12B West Sidewall (2.5'BEB)
AH #15B Bottomhole (3'BEB)
AH#15B North Sidewall (3'BEB)
AH #15 B East Sidewall 3'(BEB)
AH#15B West Sideall 3'(BEB)
AH#16B Bottomhole (3'BEB)
AH #16B South Sidewall (3'BEB)
AH #16B East Sidewall (3'BEB)
AH #16 West Sidewall (3'BEB)
AH #18B Bottomhole (2.5'BEB)
AH #18B North Sidewall (2.5'BEB)
AH #18B South Sidewall (2.5'BEB)
AH #18 B East Sidewall (2.5'BEB)
AH #18B West Sidewall (2.5'BEB)

## Sample Cross Reference 573370



Chili Parlor 17 Federal #3H Transfer Line

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	01-11-18 00:00		573370-001
S	01-11-18 00:00		573370-002
S	01-11-18 00:00		573370-003
S	01-11-18 00:00		573370-004
S	01-11-18 00:00		573370-005
S	01-11-18 00:00		573370-006
S	01-11-18 00:00		573370-007
S	01-11-18 00:00		573370-008
S	01-11-18 00:00		573370-009
S	01-11-18 00:00		573370-010
S	01-11-18 00:00		573370-011
S	01-11-18 00:00		573370-012
S	01-11-18 00:00		573370-013
S	01-11-18 00:00		573370-014
S	01-11-18 00:00		573370-015
S	01-11-18 00:00		573370-016
S	01-11-18 00:00		573370-017
S	01-11-18 00:00		573370-018
S	01-11-18 00:00		573370-019
S	01-11-18 00:00		573370-020
S	01-11-18 00:00		573370-021
S	01-11-18 00:00		573370-022
S	01-11-18 00:00		573370-023





## CASE NARRATIVE

Client Name: Tetra Tech- Midland Project Name: Chili Parlor 17 Federal #3H Transfer Line

Project ID: Work Order Number(s): 573370 Report Date:15-JAN-18Date Received:01/12/2018

#### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Tetra Tech- Midland, Midland, TX

Project Name: Chili Parlor 17 Federal #3H Transfer Line



Date Received in Lab:Fri Jan-12-18 08:38 amReport Date:15-JAN-18Project Manager:Kelsey Brooks

Contact:Ike TavarezProject Location:Lea County,New Mexico

	Lab Id:	573370-0	01	573370-0	002	573370-0	03	573370-0	04	573370-0	005	573370-0	06
Analysis Requested	Field Id:	AH #2B Bottomh	ole (3'BEE	AH #2B North Sid	lewall (3'B	AH #2B South Sid	ewall (3'B	AH #2B East Sidev	vall (3'BEl	AH #2B West Sid	ewall (3'BE	AH #12B Bottomh	ole (2.5BI
Analysis Kequestea	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 (	00:00	Jan-11-18 (	00:00	Jan-11-18 (	0:00	Jan-11-18 0	0:00	Jan-11-18 (	00:00	Jan-11-18 0	0:00
Inorganic Anions by EPA 300/300.1	Extracted:	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18	13:30	Jan-12-18 1	3:30
	Analyzed:	Jan-15-18 1	5:42	Jan-15-18 1	2:31	Jan-15-18 1	2:38	Jan-15-18 1	2:45	Jan-15-18	2:52	Jan-15-18 1	3:13
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		39.2	4.94	48.2	4.96	357	4.92	7.59	4.94	92.2	4.98	<4.99	4.99

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.

Mike Kimmel Client Services Manager



Tetra Tech- Midland, Midland, TX

Project Name: Chili Parlor 17 Federal #3H Transfer Line



Date Received in Lab:Fri Jan-12-18 08:38 amReport Date:15-JAN-18Project Manager:Kelsey Brooks

Contact:Ike TavarezProject Location:Lea County,New Mexico

	Lab Id:	573370-0	07	573370-0	08	573370-0	09	573370-0	10	573370-0	)11	573370-0	12
Analysis Requested	Field Id:	AH #12B NorthSic	dewall (2.5	AH #12B Southsid	wall (2.5'I	AH #12B East Side	wall (2.5 ]	AH #12B West Si	lewall (2.5	AH #15B Bottoml	hole (3'BEI	AH#15B North Sic	dewall (3'E
Anaiysis Kequesiea	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 0	0:00	Jan-11-18 0	0:00	Jan-11-18 0	0:00	Jan-11-18 0	0:00	Jan-11-18 (	00:00	Jan-11-18 0	0:00
Inorganic Anions by EPA 300/300.1	Extracted:	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18	13:30	Jan-12-18 1	3:30
	Analyzed:	Jan-15-18 1	3:20	Jan-15-18 1	3:27	Jan-15-18 1	3:34	Jan-15-18 1	3:41	Jan-15-18	6:17	Jan-15-18 1	4:08
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.93	4.93	<4.97	4.97	<4.95	4.95	8.58	4.91	83.1	4.99	8.66	4.97

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.

Mike Kimmel Client Services Manager



Tetra Tech- Midland, Midland, TX

Project Name: Chili Parlor 17 Federal #3H Transfer Line



Date Received in Lab:Fri Jan-12-18 08:38 amReport Date:15-JAN-18Project Manager:Kelsey Brooks

Contact:Ike TavarezProject Location:Lea County,New Mexico

	Lab Id:	573370-0	13	573370-0	14	573370-0	15	573370-0	16	573370-0	)17	573370-0	18
Analysis Requested	Field Id:	AH #15 B East Sic	lewall 3'(E	AH#15B West Side	eall 3'(BEI	AH#16B Bottomh	ole (3'BEE	AH #16B South Si	dewall (3'l	AH #16B East Sid	ewall (3'BI	AH #16 West Side	wall (3'BE
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jan-11-18 0	0:00	Jan-11-18 0	0:00	Jan-11-18 0	0:00	Jan-11-18 (	0:00	Jan-11-18 (	00:00	Jan-11-18 0	00:00
Inorganic Anions by EPA 300/300.1	Extracted:	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18 1	13:30	Jan-12-18 1	3:30
	Analyzed:	Jan-15-18 1	4:15	Jan-15-18 1	4:47	Jan-15-18 1	4:54	Jan-15-18 1	5:01	Jan-15-18 1	15:08	Jan-15-18 1	5:15
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<4.98	4.98	<4.95	4.95	<4.93	4.93	34.9	4.95	60.0	4.93	51.5	4.98

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.

Mike Kimmel Client Services Manager



Tetra Tech- Midland, Midland, TX

Project Name: Chili Parlor 17 Federal #3H Transfer Line



Date Received in Lab:Fri Jan-12-18 08:38 amReport Date:15-JAN-18Project Manager:Kelsey Brooks

Contact:Ike TavarezProject Location:Lea County,New Mexico

	Lab Id:	573370-0	19	573370-0	20	573370-0	21	573370-0	22	573370-0	023	
Analysis Requested	Field Id:	AH #18B Bottomh	ole (2.5'B)	AH #18B North Si	dewall (2.	AH #18B South Si	dewall (2.	AH #18 B East Sid	lewall (2.5	AH #18B West Si	dewall (2.5	
Analysis Kequestea	Depth:											
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	Jan-11-18 0	0:00	Jan-11-18 0	0:00	Jan-11-18 0	0:00	Jan-11-18 0	0:00	Jan-11-18 (	00:00	
Inorganic Anions by EPA 300/300.1	Extracted:	Jan-12-18 1	3:30	Jan-12-18 1	3:30	Jan-12-18 1	5:00	Jan-12-18 1	5:00	Jan-12-18 1	5:00	
	Analyzed:	Jan-15-18 1	5:22	Jan-15-18 1	5:29	Jan-15-18 1	7:51	Jan-15-18 1	8:12	Jan-15-18 1	7:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		23.6	4.98	<4.97	4.97	5.74	4.94	204	4.98	189	4.99	

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.

Mike Kimmel Client Services 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.
- 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
- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

#### Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

#### A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - San Antonio - Atlanta - Midland/Odessa - Tampa/Lakeland - Phoenix - Latin America

	Phone	Fax
4147 Greenbriar Dr, Stafford, TX 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
1211 W Florida Ave, Midland, TX 79701	(432) 563-1800	(432) 563-1713
2525 W. Huntington Dr Suite 102, Tempe AZ 85282	(602) 437-0330	





### Project Name: Chili Parlor 17 Federal #3H Transfer Line

Work Order #: 573370							Pro	ject ID:			
Analyst: OJS	D	ate Prepai	red: 01/12/20	18			Date A	nalyzed: (	01/15/2018		
Lab Batch ID: 3038311 Sample: 7637396-	1-BKS	Batc	<b>h #:</b> 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE / ]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	ΟY	
Inorganic Anions by EPA 300/300.1 Analytes	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
Chloride	<5.00	250	273	109	250	275	110	1	90-110	20	
Analyst: OJS	D	ate Prepa	red: 01/12/20	18			Date A	nalyzed: (	01/15/2018		
Lab Batch ID: 3038314 Sample: 7637422-	1-BKS	Batc	<b>h #:</b> 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE / ]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	ΟY	
Inorganic Anions by EPA 300/300.1 Analytes	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
Chloride	<5.00	250	238	95	250	241	96	1	90-110	20	





#### Project Name: Chili Parlor 17 Federal #3H Transfer Line

Work Order # :	573370						Project II	):				
Lab Batch ID:	3038311	QC- Sample ID:	573370-0	01 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	01/15/2018	Date Prepared:	01/12/201	8	An	alyst: (	DJS					
<b>Reporting Units:</b>	mg/kg		МА	TRIX SPIK	E / MAT	RIX SPI	KE DUPLICA'	TE REC	OVERY	STUDY		
Inorgar	nic Anions by EPA 300/300.1	Parent Sample Result	Spike Added	piked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[0]	[D]	[E]	Kesut [F]	[G]	/0	701	70KI D	
Chloride		39.2	247	283	99	247	286	100	1	90-110	20	
Lab Batch ID:	3038311	QC- Sample ID:	573370-0	11 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	01/15/2018	Date Prepared:	01/12/201	8	An	alyst: (	DJS					
<b>Reporting Units:</b>	mg/kg		МА	TRIX SPIK	E / MAT	RIX SPI	KE DUPLICA'	TE REC	OVERY	STUDY		
Inorgar	nic Anions by EPA 300/300.1	Parent Sample Result	Spike Added	piked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[0]	[D]	[E]	itesuit [i ]	[G]				
Chloride		83.1	250	328	98	250	328	98	0	90-110	20	
Lab Batch ID:	3038314	QC- Sample ID:	573370-02	23 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	01/15/2018	Date Prepared:	01/12/201	8	An	alyst: (	OJS					
<b>Reporting Units:</b>	mg/kg		МА	TRIX SPIK	E / MAT	RIX SPI	KE DUPLICA'	TE REC	OVERY	STUDY		
Inorgar	nic Anions by EPA 300/300.1	Parent Sample Result	Spike Added	piked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	נטן	/0K [D]	[E]	Acoutt [1]	[G]	/0		/0111	
Chloride		189	250	445	102	250	456	107	2	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.

Tetra Tech, Inc.         Services
on N. B. Barnessen T. LEG Barsense T. LEG Bars
Conductions     ST33 TU       ST32 TU
ANALYSIS RECUEST ANALYSIS RECUEST CICLE OF Specify Method N ANALYSIS RECUEST ANALYSIS
AMALYSIS REQUEST AMALYSIS RECUEST AMALYSIS REC

age 12

Relinquished by: relinquished by: une la Relinquished by state) Analysis Request of Chain of Custody Record Receiving Laboratory: nvoice to: Project Location: Project Name Client Name: omments LAB USE LAB # 븕 AH #18B North Sidewall (2.5'BEB) AH #18B BottomHole (2.5'BEB) AH #16B West Sidewall (3'BEB) AH #16B East Sidewall (3'BEB) AH #16B South Sidewall (3'BEB) AH #16B BottomHole (3'BEB) AH #15B West Sidewall (3'BEB) AH #15B East Sidewall (3'BEB) AH #15B North Sidewall (3'BEB) AH #15B BottomHole (3'BEB) (county, Lea County, New Mexico Xenco Midland Tx Chili Parlor 17 Federal #3H Transfer Line Fetra Tech, Inc. Marathon 7 Tetra Tech, Inc. SAMPLE IDENTIFICATION 1-12-18 Date: Date: Date: Time: lime: S 2 ORIGINAL COPY Received by received by Sampler Signature: Project #: Site Manager: eceived by 1/11/2018 1/11/2018 1/11/2018 EAR: 2017 1/11/2018 1/11/2018 1/11/2018 1/11/2018 1/11/2018 1/11/2018 1/11/2018 DATE MM SAMPLING TIME 5 WATER Ike Tavarez MATRIX × × × × × × × × XX SOIL Mike Carmona 212C-MD-01042 4000 N. Big Spring Street, Ste 401 Midland, Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946 Date: Date: 12.18 Date HCL PRESERVATIVE HNO<sub>3</sub> × ×  $\times \times$ × × × × × × ICE Time: lime: Ime None 80 # CONTAINERS 2 2 2 2 2 5 2 2 2 2 FILTERED (Y/N) (Circle) (HAND DELIVERED Sample Temperature BTEX 8021B BTEX 8260B AB USE ONLY TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Circle or Specify Method No. Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg REMARKS: TCLP Volatiles ANALYSIS REQUEST X RUSH: Same Day 24 hr FEDEX UPS Rush Charges Authorized TCLP Semi Volatiles 573370 Special Report Limits or TRRP Report RCI STANDARD GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082/608 NORM PLM (Asbestos) Page ×× ×  $\times \times \times \times \times$ × × Chloride Chloride Sulfate TDS 48 hr General Water Chemistry (see attached list) Anion/Cation Balance 72 hr N of Hold Final 1.000

Relinquished by: Relinquished by: state) Relinquished by Comments: Invoice to: Receiving Laboratory: Client Name: roject Location: roject Name: miste LAB USE LAB # Ę AH #18B West Sidewall(2.5'BEB) AH #18B East Sidewall(2.5'BEB) AH #18B South Sidewall (2.5'BEB) (county, Lea County, New Mexico Xenco Midland Tx Chili Parlor 17 Federal #3H Transfer Line Marathon Tetra Tech, Inc. Tetra Tech, Inc. SAMPLE IDENTIFICATION ٤ 1-12-18 Date: Date: Date: Time: Time: lime: N Received by: Received by: Redelived by Sampler Signature: Project #: Site Manager: 'EAR: 2017 1/11/2018 1/11/2018 1/11/2018 DATE SAMPLING TIME K WATER Ike Tavarez MATRIX × × × SOIL Mike Carmona 212C-MD-01042 4000 N. Big Spring Street, Ste 401 Midland, Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946 Date: Date: Date: 5 HCL PRESERVATIVE HNO<sub>3</sub> × × × ICE Time: Time: Time: None 86 # CONTAINERS 3 2 2 FILTERED (Y/N) Sample Temperature (Circle) MAND DELIVERED BTEX 8021B BTEX 8260B AB USE ONLY TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Circle or Specify Method No. Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg REMARKS: TCLP Volatiles ANALYSIS REQUEST X RUSH: Same Day 24 h FEDEX UPS Tracking #: Rush Charges Authorized TCLP Semi Volatiles Special Report Limits or TRRP Report RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082/608 1231 NORM Page PLM (Asbestos) × × × Chloride Chloride Sulfate TDS 48 hr General Water Chemistry (see attached list) Anion/Cation Balance 72 hr ω of Hold Final 1.000

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Client: Tetra Tech- Midland

## **XENCO** Laboratories Prelogin/Nonconformance Report- Sample Log-In



Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 01/12/2018 08:38:00 AM Temperature Measuring device used : R8 Work Order #: 573370 Comments Sample Receipt Checklist -1.4 #1 \*Temperature of cooler(s)? #2 \*Shipping container in good condition? Yes #3 \*Samples received on ice? Yes #4 \*Custody Seals intact on shipping container/ cooler? N/A #5 Custody Seals intact on sample bottles? N/A #6\*Custody Seals Signed and dated? N/A #7 \*Chain of Custody present? Yes #8 Any missing/extra samples? No #9 Chain of Custody signed when relinquished/ received? Yes #10 Chain of Custody agrees with sample labels/matrix? Yes #11 Container label(s) legible and intact? Yes #12 Samples in proper container/ bottle? Yes #13 Samples properly preserved? Yes #14 Sample container(s) intact? Yes #15 Sufficient sample amount for indicated test(s)? Yes #16 All samples received within hold time? Yes

#17 Subcontract of sample(s)?

#18 Water VOC samples have zero headspace?

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

Analyst:

PH Device/Lot#:

Date: 01/12/2018

No

N/A

Checklist completed by: Shawnee Smith Checklist reviewed by: Mark South Kelsey Brooks

Date: 01/12/2018