Received by OCD: 5/14/2021 10:15:53 AM

SITE INFORMATION

Report Ty	/pe: Cont	inued Work	Plan 2RP-5	6449 and	d 2RP-54	169							
General Site Information:													
Site & Lease No:		White Federal C	om #001H										
Company:		COG Operating	LLC										
Section, Township and Ra	ange	Unit L	Sec. 22	T 25S	R 29E								
Lease Number:		API No.											
County:		Eddy County											
GPS:			32.114263			-103.977405							
Surface Owner:		Federal											
Directions:			From the intersection of Hwy 285 and Longhorn Rd. turn east on Longhorn Rd. and go ~3.91 miles, turn (north) and go 3.69 miles and location is on West side of Rd.										
		turn (north) and go	3.69 miles and loca	ation is on W	est side of Ro	d.							
		1											
		1											
Release Data:													
			1										
RP Number	2RP- 5449	2RP- 5469		Ļ									
Date Released:	5/13/2019	5/17/2019		Ļ									
Type Release:	Produced Water	Produced Water		Ļ									
Source of Contamination:	Flowline	Flowline											
Fluid Released:	46 bbl	20 bbl		Ļ									
Fluids Recovered:	0 bbls	0 bbls											
Official Communication:					-								
Name:	Brittany Esparza				Clair Gonzal	les							
Company:	Conoco Phillips				Tetra Tech								
Address:	3CC-2064				901 West W	all Street							
					Suite 100								
City:	Midland Texas, 797	01			Midland, Tex	xas							
Phone number:	(432) 686-0398				(432) 687-81	110							
Fax:	<mark>(432) 684-1911</mark>												
Email:	Brittany.Esparza@c	conocophillips.com			Clair.Gonzal	les@tetratech.com							

Site Characterization	
Depth to Groundwater:	60' below surface
Karst Potential:	Medium

Recommended Remedial A	ction Levels (RR/	ALs)	
Benzene	Total BTEX	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	100 mg/kg	600 mg/kg



May 13, 2021

Mr. Mike Bratcher District Supervisor Oil Conservation Division, District 2 811 S. First Street Artesia, New Mexico 88210

Re: Monitoring Work Plan for the COG Operating, LLC, White Federal Com #1H, Unit L, Section 22, Township 25 South, Range 29 East, Eddy County, New Mexico. 2RP-5449 and 2RP-5469

Mr. Bratcher;

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating, LLC (COG) to assess a release that occurred at the White Federal Com #1H, Unit L, Section 22, Township 25 South, Range 29 East, Eddy County, New Mexico (Site). The spill site coordinates are 32.114263°, -103.977405°. The site location is shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report, the release was discovered on May 13, 2019, and released approximately 46 barrels of produced water due the flowline being ruptured. None of the produced water was recovered. The release occurred on the pasture and migrated into the draw impacting areas measuring approximately 65' x 40' and 1,290' x 15'.

On May 17, 2019, a second release occurred at the site and released approximately 20 barrels of produced water. The release overlapped the first release approximately 200' in the draw. The C-141 Forms are included in Appendix A.

WORK PLAN SUBMITTAL

On February 23, 2020, the BLM approves the monitoring work plan for 2RP-5449 and 2RP-5469. The NMOCD denied the monitoring plan and requested the impacted area be remediated per guideline.

SITE CHARATERIZATION

A site characterization was performed for the site and no lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. However, the site is in a medium karst potential area and migrated into a draw. Also, a watercourse is located within 300' of the site, according to the USGS topographic map.

The nearest water well is listed on the New Mexico State Engineer's (NMOSE) database, approximately 2.82 miles north of the site, and has a reported depth to groundwater of 60' below surface. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in the area is approximately 175' below surface. The site characterization data is shown in Appendix B.

 Tetra Tech

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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, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, the proposed RRAL for TPH is 100 mg/kg (GRO + DRO + MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 600 mg/kg.

SOIL ASSESSMENT AND ANALYTICAL RESULTS

Pasture Area Sampling

On May 21, 2019, Tetra Tech personnel were on-site to evaluate and sample the release area. A total of four (4) auger holes (AH-1 through AH-4) were installed in the pasture area release area to total depths ranging from surface to 3.5' below surface. Additionally, ten (10) horizontal delineation samples (Horizontal Northwest-1, Horizontal Northwest-3, Horizontal Northwest-4, Horizontal Northwest-5, Horizontal Northwest-6, Horizontal Southeast-1, Horizontal Southeast-2, and Horizontal Southeast-3, Horizontal Southeast-4) were collected outside the spill footprint. Selected soil samples were collected and submitted to the laboratory 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 3a.

Auger holes Installation

Referring to Table 1, none of the samples analyzed showed benzene, TPH, or total BTEX concentrations above the laboratory reporting limits. However, the areas of auger holes AH-1 and AH-2 showed elevated chloride concentrations ranging from 4,280 mg/kg to 10,200 mg/kg at surface to 2.5'-3.0' below surface. The area of auger hole AH-3 showed chloride concentrations of 11,300 mg/kg at 0-1' and 11,800 mg/kg at 1'-1.5' below surface. The area of auger hole AH-4 showed a high chloride concentration of 5,220 mg/kg from surface to 1.0' and then declined with depth to below the RRALs at 1.0'-1.5' below surface. The areas of AH-1 AH-2, and AH-3 were not vertically defined for chlorides. and deeper samples were not collected due to the dense formation in the area.

Horizontals Delineation

Referring to Table 1, the areas of horizontal delineation samples (Horizontal Northwest-3, Horizontal Northwest-4, Horizontal Northwest-5, Horizontal Southeast-2, and Horizontal Southeast-3) showed any benzene, total BTEX, TPH, or chloride concentrations above the RRAL's. However, the areas of the horizontal delineation samples (Horizontal Northwest-1, Horizontal Northwest-2, Horizontal Northwest-6, Horizontal Southeast-1, and Horizontal Southeast-4) showed high chloride concentrations ranging from 854 mg/kg to 12,800 mg/kg at 0-1' below surface. The areas then declined with depth at 1.0'-1.5' below surface with concentrations ranging from 35.8 mg/kg to 403 mg/kg.

Background

Referring to Table 1, the background samples showed chloride concentrations ranging from 24.3 mg/kg to 213 mg/kg at a depth of surface to 1.0' below surface.

Draw Area Sampling

A total of ten (10) auger holes were installed in the draw area (AH-5 through AH-14) to total depths ranging from 1.0'-4.5' below surface. Four (4) background auger holes were installed in order to evaluate the native soils.



Selected soil samples were collected and submitted to the laboratory 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 and the results of the sampling are summarized in Table 1. The sample locations are shown on Figure 3.

Referring to Table 1, all the samples analyzed for benzene, total BTEX, and TPH were below the laboratory reporting limits. Also, the areas of auger holes (AH5, AH-6, AH-7, AH-8, AH-9, AH-10, AH-11, AH-12, AH-13, and AH-14) all showed chloride concentrations above the RRAL, with concentrations ranging from 947 mg/kg to 22,300 mg/kg. Only the area of AH-10 was vertically defined for chloride with a concentration of 564 mg/kg at 2.0'-2.5' below surface.

SAMPLING EVENTS

Draw Area - Sampling Event – June 2019

Based on the area having a heavy rainfall event, Tetra Tech returned on June 18, 2019, to install ten (10) auger holes in the **draw area** (AH-5 through AH-14) to total depths ranging from 1.0'-4.5' below surface. The rain has significantly helped dilute or help migrate the chloride concentrations during those events. The soil samples were collected and submitted to the laboratory for chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C, and sampling summarized in Table 1. The sample locations are shown on Figure 3 and Figure 3A.

Referring to Table 1, the areas of auger holes (AH-1 through AH-13) showed high chloride concentrations of 2,430 mg/kg, 2,110 mg/kg, 2,250 mg/kg, 1,390 mg/kg, 8,060 mg/kg, 11,600 mg/kg, 5,570 mg/kg, 12,300 mg/kg, 9,710 mg/kg, 623 mg/kg, 8,560 mg/kg, 1,470 mg/kg, and 635 mg/kg. The area of auger hole (AH-14) showed a chloride concentration of 24.9 mg/kg. Based on the data supported from the second event of sampling, the rain events have showed to help the chloride concentrations decrease overtime.

Draw and Pasture Areas - Sampling Event - February 2020

Tetra Tech returned on February 18, 2020, to install fourteen (14) auger holes in the **draw and pasture** area (AH-1 through AH-14) to total depths ranging from 1.0'-3.5' below surface. The rain has significantly helped dilute or help migrate the chloride concentrations during those events. The soil samples were collected and submitted to the laboratory for chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C, and sampling summarized in Table 1. The sample locations are shown on Figure 3 and Figure 3A.

Referring to Table 1, the areas of auger holes (AH-1, AH-2, and AH-4) showed chloride concentrations ranging from 692 mg/kg and 4,940 mg/kg. The areas of auger holes (AH-3, AH-5, AH-6, AH-7, AH-8, AH-9, AH-10, AH-11, AH-12, AH-13, and AH-14) all showed chloride concentration below the regulatory limit. Based on the data supported by the recent sampling, the rain events have showed to help the chloride concentrations decrease over time.

Draw and Pasture Areas - Sampling Event - April 2020

Tetra Tech returned on April 30, 2020, to install fourteen (14) auger holes in the **draw and pasture** area (AH-1 through AH-14) to total depths ranging from 1.0'-4.5' below surface. The rain has significantly helped dilute or help migrate the chloride concentrations during those events. The soil samples were collected and submitted to the laboratory for chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C, and sampling summarized in Table 1. The sample locations are shown on Figure 3 and Figure 3A.

Referring to Table 1, the areas of auger holes (AH-2 and AH-8) showed chloride concentrations of 4,210 mg/kg and 2,180 mg/kg, respectively. The areas of auger holes (AH-1, AH-3, AH-4, AH-5, AH-6, AH-7, AH-9, AH-

4



10, AH-11, AH-12, AH-13, and AH-14) all showed chloride concentration below the regulatory limit. Based on the data supported by the recent sampling, the rain events have showed to help the chloride concentrations decrease over time.

Pasture Area - Sampling Event - June 2020

On June 18, 2020, Tetra Tech returned to install two (2) auger holes in the **pasture area** (AH-2 and AH-4) to total depths ranging from 1.0'-2.5' below surface. In addition, re-sampled the (four) 4 areas of horizontal delineation samples (Horizontal Northwest-1, Horizontal Northwest-2, Horizontal Northwest-6, Horizontal Southeast-1, and Horizontal Southeast-4). The sampling results are shown in Table 1.

Referring to Table 1, the area of auger hole (AH-2) showed high chloride concentrations of 4,210 mg/kg the area of auger hole (AH-4) showed a chloride concentration below the regulatory limit. The areas of horizontal delineation samples (Horizontal Northwest-1 and Horizontal Southeast-1 showed chloride concentrations above the RRAL's with concentrations of 4,480 mg/kg and 3,340 mg/kg. However, the areas of the horizontal delineation samples (Horizontal Northwest-2, Horizontal Northwest-6, and Horizontal Southeast-4) showed chloride concentrations ranging from 13.7 mg/kg to 239 mg/kg at 0-1' below surface.

The rain has significantly helped dilute or help migrate the chloride concentrations during those events. The soil samples were collected and submitted to the laboratory for chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C, and sampling summarized in Table 1. The sample locations are shown on Figure 3 and Figure 3A.

Pasture Area - Sampling Event - August 2020

On August 19, 2020, Tetra Tech re-sampled samples the **pasture areas** of horizontal delineation (Horizontal Northwest-1). Referring to Table 1, the areas of horizontal delineation samples (Horizontal Northwest-1) showed chloride concentrations above the RRAL's with concentrations of 3,520 mg/kg.

Draw and Pasture Areas - Sampling Event – August 2020

On August 19, 2020, Tetra Tech returned to install two (2) auger holes in the **draw area** (AH-2 and AH-8) to total depths ranging from 1.0'-4.5' below surface. In addition, re-sampled the **pasture area** of horizontal delineation (Horizontal Northwest-1, Horizontal Northwest-2, Horizontal Southeast-1, and Horizontal Southeast-4). The sampling results are shown in Table 1.

Referring to Table 1, the area of auger hole (AH-2) showed high chloride concentrations of 17,600 mg/kg and 24,600 mg/kg. The area of auger hole (AH-8) showed chloride concentrations ranging from 16.1 mg/kg to 2,560 mg/kg. The areas of horizontal delineation samples (Horizontal Northwest-1 and Horizontal Southeast-1) showed chloride concentrations above the RRAL's with concentrations of 3,520 mg/kg and 3,340 mg/kg, respectively.

The rain has significantly helped dilute or help migrate the chloride concentrations during those events. The soil samples were collected and submitted to the laboratory for chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C, and sampling summarized in Table 1. The sample locations are shown on Figure 3 and Figure 3A.

Horizontal Delineation - Sampling Event - May 2021

On May 4, 2021, per the NMOCD request, Tetra Tech returned to install five (5) horizontal samples in the **pasture area** (H-1 through H-5) to total depths ranging from surface to 1.0' below surface to horizontally delineate the area of AH-2. The soil samples were collected and submitted to the laboratory 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, and sampling summarized in Table 1. The sample locations are shown on Figure 3 and Figure 3A. The sampling results are shown in Table 1.

Referring to Table 1, all samples did not report benzene, BTEX, or total TPH concentrations above laboratory reporting limits. Additionally, all samples showed chloride concentrations below RRALs, concentrations ranging from 68.8 mg/kg to 448 mg/kg.

Conclusion

According to the data, there are **four (4) areas** that are above the regulatory limit for chlorides. These areas include the **pasture area (AH-2, H-NW1 and H-SE1)** and **draw area (AH-8)**. Based on the monitoring results, we are continuing to see a reduction of chloride concentrations in the soils over time, especially after a heavy rainfall. The area of auger hole (AH-8) has limited access and safety concerns due to the depth of the draw, and can't safely access. Also, further impact on the native vegetation would be higher than removing the impact from the area.

On February 23, 2020, the BLM approved the monitoring work plan. However, the NMOCD denied the monitoring plan on March 25, 2020, and requested the impacted areas to be remediated per guidelines. Upon further site review, COG has concerns with safety, lines, and access issues, which are summarized below.

Tetra Tech personnel met on-site with the contractor to inspect and determine if the site can be safely remediated. After further evaluation, the site was determined to have high traffic, its proximity is near the edge of the road, and no place to stage, trucks, equipment, and material for the site to be properly excavated. Also, impacted soil around structures or lines may not be viable or practicable to be removed due to safety concerns for on-site staff.

Proposed Monitoring Plan

Based on the data supported by the sampling events, the rain events in the area have affected the chloride concentrations and continue to show a reduction of concentrations over time. While the concentrations are not consistent, they are showing a decreasing trend. Based on safety issues concerning traffic, lines, damage to the pasture, and access issues, COG proposes to continue the monitoring process of the pasture area and draw area in 2021. Site monitoring activities will be performed on a quarterly basis or after a heavy rain event until the chlorides are below the regulatory limit.

Once the chlorides are below the regulatory threshold, a final report will be submitted. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559. Additionally, if an onsite meeting would be necessary, COG could coordinate to schedule with all parties involved.

Respectfully submitted, TETRA TECH

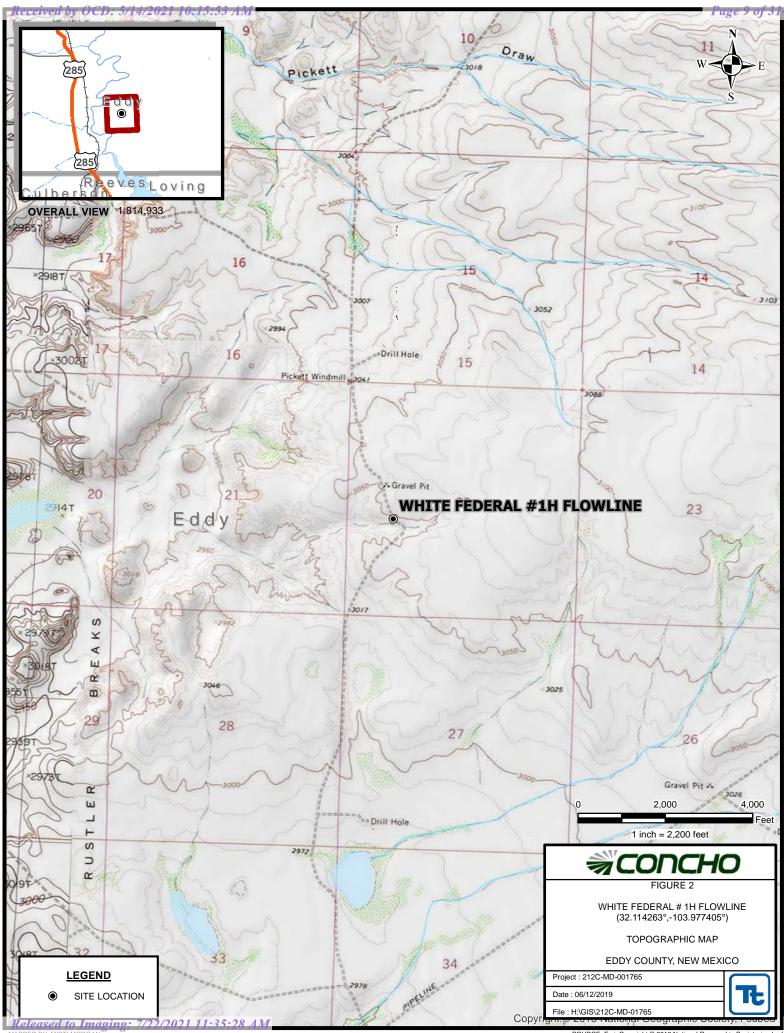
Clair Gonzales, P.G., Project Manager

Figures

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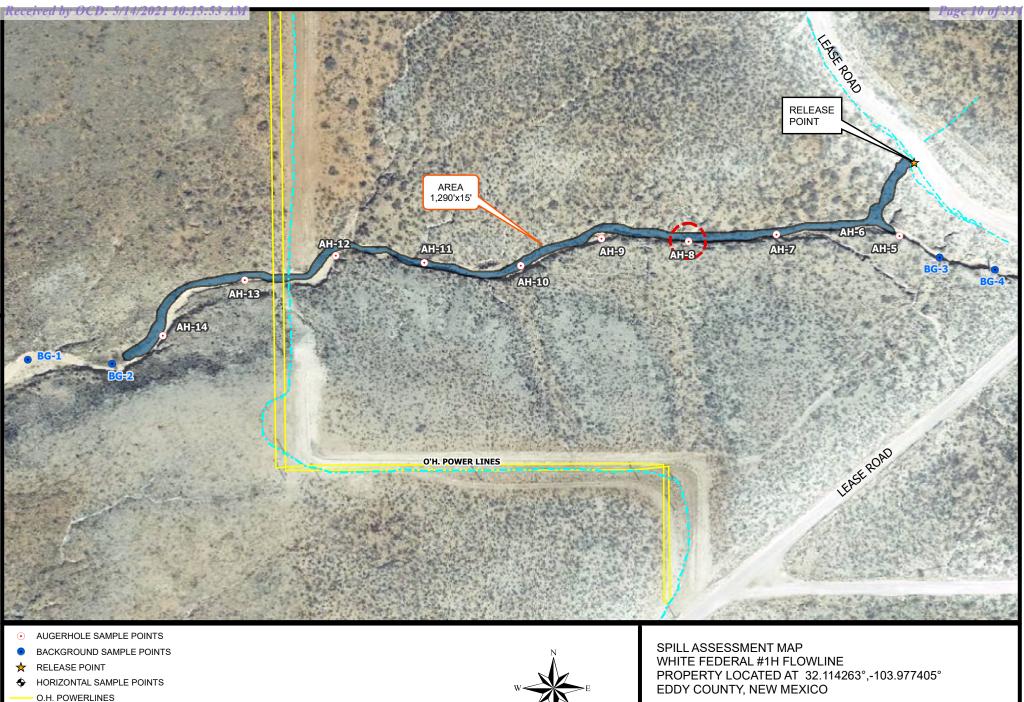


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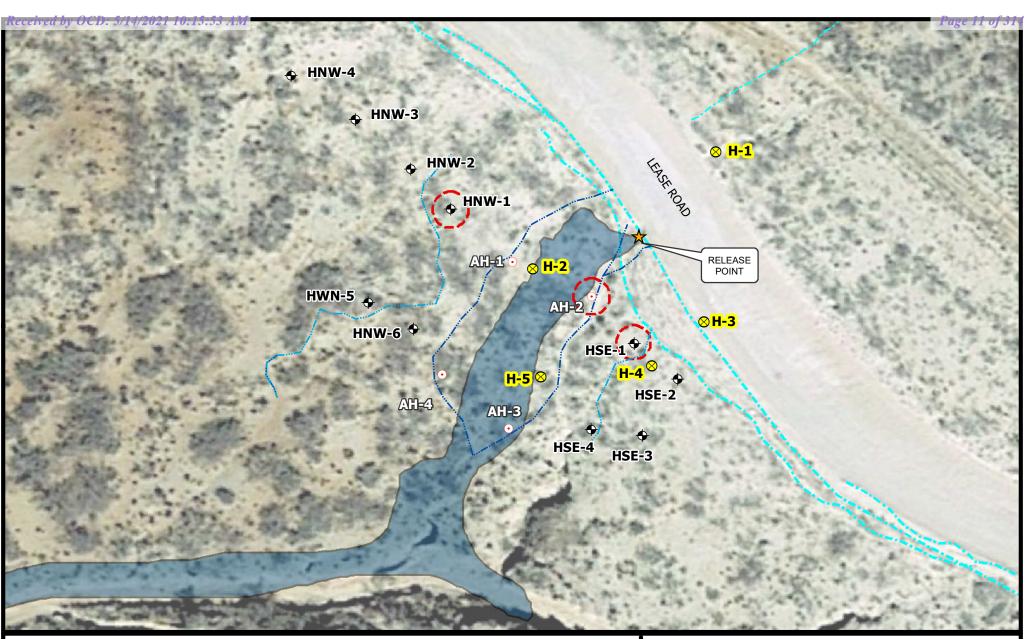


- FLOWLINE
- AREA EXCEEDING REGULATORY LEVELS
- SPILL AREA

Approximate Scale in Feet



Source: "New Nextor", 32° 651.35°N, 103°58'38.66°N. Google Earth. Partury, 2019 December 3, 2019. March 2019 December 3, 2019.



- AUGERHOLE SAMPLE POINTS
- ★ RELEASE POINT
- HORIZONTAL SAMPLE POINTS
- O HORIZONTAL SAMPLE POINTS 05/04/21
- O.H. POWERLINES
- FLOWLINE
- C AREA EXCEEDING REGULATORY LEVELS
- SPILL AREA



Approximate Scale in Feet

SPILL ASSESSMENT MAP WHITE FEDERAL #1H FLOWLINE PROPERTY LOCATED AT 32.114263°,-103.977405° EDDY COUNTY, NEW MEXICO



Source: "New Mexico". 32° 651.35"N, 103°58'38.66"W. Google Earth.

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Tables

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		Sample	BEB	Soil	Status		TPH (mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	Sample Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
							Pastu	ire Area							
AH-1	5/21/2019	0-1	-	Х	-	<15.0	<15.0	<15.0	<15.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4,280
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	4,890
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	5,600
	"	2.5-3	-	Х	-	-	-	-	-	-	-	-	-	-	7,320
AH-1	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	36.9
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	680
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	34.9
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	2,430
AH-1	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	1,630
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	16.1
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	2,310
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	4,940
AH-1	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	29.2
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	21.5
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	16.2
	"	2.5-3	-	Х	-	-	-	-	-	-	-	-	-	-	36.5
AH-2	5/21/2019	0-1	-	Х	-	<15.0	<15.0	<15.0	<15.0	< 0.00201	< 0.00201	<0.00201	< 0.00201	< 0.00201	13,800
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	17,600
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	10,200
AH-2	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	1,090
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	2,110
AH-2	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	2,130
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	722
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	692
AH-2	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	387
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	1,100
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	2,740

		Sample	BEB	Soil	Status		TPH (mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	Sample Depth (ft)	In-Situ		GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-2	6/18/2020	0-1	-	Х	-	-	-	-	•	-	-	-	-	-	720
	"	1-1.5	-	Х	-	-	-	-	•	-	-	-	-	-	4,180
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	4,210
AH-2	8/19/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	17,600
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	24,600
AH-2	5/4/2021	0' - 1'	-	-	-	-	-	-	-	-	-	-	-	-	888
	"	1' - 1.5'	-	-	-	-	-	-	-	-	-	-	-	-	1,020
	"	2' - 2.5'	-	-	-	-	-	-	-	-	-	-	-	-	3,020
AH-3	5/21/2019	0-1	-	Х	-	<15.0	<15.0	<15.0	<15.0	< 0.00200	< 0.00200	<0.00200	<0.00200	< 0.00200	11,400
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	11,800
AH-3	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	171
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	2,250
AH - 3	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	25.8
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	25.2
AH - 3	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	15.0
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	20.1
AH-4	5/21/2019	0-1	-	Х	-	<15.0	<15.0	<15.0	<15.0	< 0.00201	< 0.00201	<0.00201	<0.00201	< 0.00201	5,220
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	526
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	582
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	338
AH-4	6/18/2019	0-1	-	Х	-	-	-	-		-	-	-	-	-	61.6
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	78.9
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	1,390
AH-4	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	2,940
		1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	1,680
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	814
	"	3-3.5	-	х	-	-	-	-	-	-	-	-	-	-	307
AH-4	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	177
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	456
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	1,910
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	2,540

Released to Imaging: 7/22/2021 11:35:28 AM

.

		Sample	BEB	Soil	Status		TPH (mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	Sample Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-4	6/18/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	58.3
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	30.1
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	58.9
H-1	5/4/2021	0' - 1'	-	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	448
H-2	5/4/2021	0' - 1'	-	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	68.8
H-3	5/4/2021	0' - 1'	-	Х	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	99.3
H-4	5/4/2021	0' - 1'	-	Х	-	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	266
H-5	5/4/2021	0' - 1'	-	Х	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	96.1
H-NW 1	5/21/2019	0-1		Х		<15.0	<15.0	<15.0	<15.0	<0.00199	< 0.00199	<0.00199	< 0.00199	<0.00199	6,750
	"	1-1.5		Х		-	-	-	-	-	-	-	-	-	35.8
H-NW1	6/18/2020	0-1		Х		-	-	-	-	-	-	-	-	-	4,480
	8/19/2020	0-1		Х		-	-	-	-	-	-	-	-	-	3,520
	5/4/2021	0' - 1'	-	-	-	-	-	-	-	-	-	-	-	-	782
H-NW 2	5/21/2019	0-1		Х		<14.9	<14.9	<14.9	<14.9	< 0.00199	< 0.00199	<0.00199	< 0.00199	< 0.00199	1,460
	"	1-1.5		Х											276
H-NW 2	6/18/2020	0-1		Х		-	-	-	-	-	-	-	-	-	141
H-NW 3	5/21/2019	0-1		Х		<15.0	<15.0	<15.0	<15.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	217
H-NW 4	5/21/2019	0-1		Х		<15.0	<15.0	<15.0	<15.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	279
H-NW 5	5/21/2019	0-1		Х		<15.0	<15.0	<15.0	<15.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	260
H-NW 6	5/21/2019	0-1		Х		<15.0	<15.0	<15.0	<15.0	< 0.00200	< 0.00200	<0.00200	< 0.00200	< 0.00200	854
	"	1-1.5		Х		-	-	-	-	-	-	-	-	-	403
H-NW 6	6/18/2020	0-1		Х		-	-	-	-	-	-	-	-	-	239
H-SE 1	5/21/2019	0-1		Х		<14.9	<14.9	<14.9	<14.9	<0.00200	< 0.00200	<0.00200	< 0.00200	<0.00200	12,800
	"	1-1.5		Х		-	-	-	-	-	-	-	-	-	328
H-SE 1	6/18/2020	1-1.5		Х		-	-	-	-	-	-	-	-	-	3,340
	6/19/2020	0-1		Х		-	-	-	-	-	-	-	-	-	856
H-SE 1	5/4/2021	0' - 1'	-	-	-	-	-	-	-	-	-	-	-	-	2,150
1-3E 1	"	1' - 1.5'	-	-	-	-	-	-	-	-	-	-	-	-	1,960

	r							Juny, N							
Sample ID	Sample Date	Sample Depth (ft)	BEB Sample		Status			mg/kg)		Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
H-SE 2	5/21/2019	0-1	Depth (ft)	In-Situ X	Removed	GRO <15.0	DRO <15.0	MRO <15.0	Total <15.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	71.1
	5/21/2019	0-1		1							1		<0.00201		
H-SE 3	5/21/2019	0-1		Х		<15.0	<15.0	<15.0	<15.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	48.2
H-SE 4	5/21/2019	0-1		Х		<15.0	<15.0	<15.0	<15.0	<0.00200	< 0.00200	<0.00200	<0.00200	<0.00200	2,670
	"	1-1.5		Х		-	-	-	-	-	-	-	-	-	481
H-SE 4	6/18/2020	0-1		Х		-	-	-	-	-	-	-	-	-	13.7
				1			Backgrou	nd Sample							
Bookground 1	5/22/2019	0-1	_	-	- I	-	-		-	-	-		_	-	213
Background 1	1		-	-		-	-	-	-	-	-	-	-	-	213
Background 2	5/22/2019	0-1	-	-	-	-	-	-	-	-	-	-	-	-	138
Background 3	5/22/2019	0-1	-	-	-	-	-	-	-	-	-	-	-	-	153
Background 4	5/22/2019	0-1	-	-	-	-	-	-	-	-	-	-	-	-	24.3
							Drav	w Area							
AH-5	5/21/2019	0-1	-	Х	-	<15.0	<15.0	<15.0	<15.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	17,800
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	15,600
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	8,170
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	1,450
AH-5	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	38.2
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	4,260
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	8,060
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	7,510
AH-5	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	<9.98
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	<9.92
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	<9.96
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	10.5
AH -5	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	13.6
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	21.9
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	8.67
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	6.60
AH-6	5/22/2019	0-1	-	Х	-	<15.0	<15.0	<15.0	<15.0	< 0.00202	< 0.00202	<0.00202	< 0.00202	< 0.00202	15,100
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	947
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	19,000
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	20,100
	"	4-4.5	-	Х	-	-	-	-	-	-	-	-	-	-	16,600

		Sample	BEB	Soil Status TPH (mg/kg)						Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	Sample Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-6	6/18/2019	0-1	-	X	-	-	-	-	-	-	-	-	-	-	63.4
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	96.5
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	1,700
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	11,100
	"	4-4.5	-	Х	-	-	-	-	-	-	-	-	-	-	11,600
	"	5-5.5	-	Х	-	-	-	-	-	-	-	-	-	-	6,650
AH-6	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	29.4
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	14.9
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	28.7
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	22.3
	"	4-4.5	-	Х	-	-	-	-	-	-	-	-	-	-	24.7
AH -6	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	14.1
	"	1-1.5	-	X	-	-	-	-	-	-	-	-	-	-	21.4
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	48.1
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	14.1
	"	4-4.5	-	Х	-	-	-	-	-	-	-	-	-	-	10.0
AH-7	5/22/2019	0-1	_	Х	-	<15.0	<15.0	<15.0	<15.0	< 0.00199	< 0.00199	<0.00199	< 0.00199	< 0.00199	19,900
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	12,500
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	12,100
AH-7	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	716
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	1,890
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	5,570
AH-7	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	10.7
	"	1-1.5	-	X	-	-	-	-	-	-	-	-	-	-	17.7
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	<10.1
AH -7	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	10.7
	"	1-1.5	-	X	-	-	_	-	-	-	-	-	-	-	18.6
	"	2-2.5	-	X	-	-	-	-	-	-	-	-	-	-	22.8
AH-8	5/22/2019	0-1	-	Х	-	<15.0	21.1	<15.0	21.1	< 0.00199	< 0.00199	<0.00199	< 0.00199	< 0.00199	18,800
	5/22/2019	1-1.5	-	X	-		-	-	- Z I. I						22,300
	"	2-2.5	-	X	-	-	-	-	-	-	-	-	-	-	1,400
															-
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	5,010

		Sample	BEB	Soil Status TPH (mg/kg) Be						Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	Sample Depth (ft)		Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-8	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	48.6
		1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	542
	"	2-2.5	-	Х	-	-	-	-	•	-	-	-	-	-	12,300
AH-8	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	<10.1
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	<10.1
		2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	<9.94
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	14.8
	"	4-4.5	-	Х	-	-	-	-	-	-	-	-	-	-	41.4
AH-8	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	6.43
		1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	9.31
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	9.85
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	12.7
	"	4-4.5	-	Х	-	-	-	-	-	-	-	-	-	-	2,180
AH-8	8/19/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	38.3
		1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	20.3
		2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	16.1
		3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	78.7
	"	4-4.5	-	Х	-	-	-	-	-	-	-	-	-	-	2,560
AH-8	5/4/2021	0' - 1'	-	-	-	-	-	-	-	-	-	-	-	-	38.0
		1' - 1.5'	-	-	-	-	-	-	-	-	-	-	-	-	35.0
		2' - 2.5'	-	•	-	-	-	-	-	-	-	-	-	-	19.6
		3' - 3.5'	-	•	-	-	-	-	-	-	-	-	-	-	63.1
	"	4' - 4.5'	-	-	-	-	-	-	-	-	-	-	-	-	478
AH-9	5/22/2019	0-1	-	Х	-	<15.0	36.8	<15.0	36.8	< 0.00200	< 0.00200	<0.00200	< 0.00200	< 0.00200	6,250
		1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	19,100
		2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	19,600
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	9,250
AH-9	6/18/2019	0-1	-	Х	-	-	-		-	-	-	-	-	-	2,110
		1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	7,050
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	5,920
	"	3-3.5	-	Х	-	-	-	-	•	-	-	-	-	-	9,710
AH-9	2/12/2020	0-1	-	Х	-	-	-		-	-	-	-	-	-	<9.98
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	<10.0
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	10.9
		3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	12.6

		Sample	BEB	Soil	Status		трн (mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	Sample Depth (ft)	In-Situ		GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-9	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	21.7
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	7.54
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	<4.96
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	6.24
AH-10	5/22/2019	0-1	-	Х	-	<15.0	<15.0	<15.0	<15.0	< 0.00201	< 0.00201	<0.00201	< 0.00201	< 0.00201	8,560
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	17,500
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	564
AH-10	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	72.3
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	454
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	623
AH-10	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	28.1
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	19.0
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	<9.98
AH-10	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	6.77
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	16.8
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	20.4
AH-11	5/22/2019	0-1	-	Х	-	<15.0	20.5	<15.0	20.5	< 0.00200	< 0.00200	<0.00200	< 0.00200	< 0.00200	6,730
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	3,020
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	190
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	1,120
AH-11	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	52.2
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	501
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	8,560
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	3,330
AH-11	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	<10.0
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	<10.1
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	<9.88
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	15.4
AH-11	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	11.7
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	14.6
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	15.2
	"	3-3.5	-	Х	-	-	-	-	-	-	-	-	-	-	16.8
AH-12	5/22/2019	0-1	-	Х	-	<15.0	<15.7	<15.0	<15.7	<0.00201	< 0.00201	<0.00201	< 0.00201	< 0.00201	6,230
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	7,010
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	6,030
ι															

		Sample	BEB	Soil	Status		TPH (mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Sample Date	Depth (ft)	Sample Depth (ft)	In-Situ	Removed	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
AH-12	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	15.8
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	1,470
AH-12	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	<9.94
		1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	12.4
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	10.3
AH-12	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	12.1
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	14.4
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	17.4
AH-13	5/22/2019	0-1	-	-		-	-	-	-	-	-	-	-	-	6,090
	"	1-1.5	-	-		-	-	-	-	-	-	-	-	-	8,470
AH-13	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	37.4
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	34.2
	"	2-2.5	-	Х	-	-	-	-	-	-	-	-	-	-	635
AH-13	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	<10.0
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	<9.94
AH-13	4/30/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	25.3
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	16.6
AH-14	5/22/2019	0-1	-	-	-	-	-	-	-	-	-	-	-	-	2,730
AH-14	6/18/2019	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	24.9
	"	1-1.5	-	Х	-	-	-	-	-	-	-	-	-	-	6.77
AH-14	2/12/2020	0-1	-	Х	-	-	-	-	-	-	-	-	-	-	<10.0
AH-14	4/30/2020	0-1	-	х	-	-	-	-	-	-	-	-	-	-	12.4

(-)

Not Analyzed Exceeds Regulatory Limits

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Photos

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White Federal #1H Flowline

Eddy County, New Mexico



Facing Southwest, viewing AH-1 and AH-2



Facing Southwest, viewing area of AH-3 and AH-4

White Federal #1H Flowline

Eddy County, New Mexico



Facing Southeast, viewing AH-5 and BG-3



Facing West, viewing area of AH-6 and AH-7

White Federal #1H Flowline

Eddy County, New Mexico



Facing West, viewing AH-8



Facing East, viewing AH-9

White Federal #1H Flowline

Eddy County, New Mexico



Facing Northeast, viewing AH-10



Facing West, viewing AH-11



White Federal #1H Flowline

Eddy County, New Mexico



Facing Southwest, viewing AH-12



Facing West, viewing AH-13

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TETRA TECH

White Federal #1H Flowline

Eddy County, New Mexico



Facing Northeast, viewing AH-14



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Appendix A

Released to Imaging: 7/22/2021 11:35:28 AM

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

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

Page 29 of 314

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137
Contact Name	Jennifer Knowlton	Contact Telephone	(575) 748-1570
Contact email	JKnowlton@concho.com	Incident # (assigned by OCD)	
Contact mailing address	600 West Illinois Avenue, Midlar	nd, Texas 79701	

Location of Release Source

Latitude 32.11408

-103.97715

(NAD 83 in decimal degrees to 5 decimal places)

Site Name White Federal Com #001H			Site Type	Flowline		
Date Release Discovered May 17, 2019			API# (if applicable)	30-015-36185		
Unit Letter	Section	Township	Range		County	
L	22	25S	29E		Eddy	

Surface Owner: State Federal Tribal Private (Name: _

Nature and Volume of Release

Materia	l(s) Released (Select all that apply and attach calculations or specific	c justification for the volumes provided below)
Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls) 20	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The release was caused by a hole in the flowline. The flowline has been repaired The release was in the pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will evaluate the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities. Page 2

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release?
5	
19.15.29.7(A) NMAC?	
🗌 Yes 🔳 No	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

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

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: DeAnn Grant	Title: HSE Administrative Assistant
Signature:	Date:5/24/2019
email: agrant@concho.com	Telephone: (432) 253-4513
OCD Only	
Received by:	Date:
OCD Only	

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

State of New Mexico Energy Minerals and Natural **Resources Department**

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

Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Page 31 of 314

Incident ID	NAB1914934715
District RP	2RP-5449
Facility ID	fAB1914934447
Application ID	pAB1914934518

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137
Contact Name	Jennifer Knowlton	Contact Telephone	(575) 748-1570
Contact email	JKnowlton@concho.com	Incident # (assigned by OCD)	NAB1914934715
Contact mailing address	600 West Illinois Avenue, Midlar	nd, Texas 79701	

Location of Release Source

32.11408 Latitude

-103.97715

Longitude (NAD 83 in decimal degrees to 5 decimal places)

Site Name White Federal Com #001H			Site Type	Flowline		
Date Release Discovered May 13, 2019				API# (if applicable)		
Unit Letter	Section	Township	Range		County	
L	22	25S	29E		Eddy	

Surface Owner: State Federal Tribal Private (Name:

Nature and Volume of Release

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

Produced Water	Volume Released (bbls) 46	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Ves No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The release was caused by a ruptured flowline. The flowline has been repaired The release was in the pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will evaluate the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

Page 2

Oil Conservation Division

Incident ID	NAB1914934715
District RP	2RP-5449
Facility ID	fAB1914934447
Application	ID pAB1914934518

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? The volume released was greater than 25 barrels.		
Yes No			
If YES, was immediate ne	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?		
Immediate notice was given by DeAnn Grant via e-mail May 14, 2019 at 9:10 am to Mike Bratcher and Crystal Weaver.			

Initial Response

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

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: DeAnn Grant	Title: HSE Administrative Assistant
Signature:	Date:
email: agrant@concho.com	Telephone: (432) 253-4513
	1
OCD Only Received by:	Date: <u>5/29/2019</u>

Received by OCD: 5/14/2021 10:15:53 AM Form C-141 State of New Mexico

Oil Conservation Division

Incident ID	
District RP	2RP-5449 and 2RP-5469
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>60'</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🗹 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🖌 Yes 🗌 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🔽 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🔽 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🗹 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🖌 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🔽 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🗹 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🔽 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	Yes 🗌 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🗹 No
Did the release impact areas not on an exploration, development, production, or storage site?	🖌 Yes 🗌 No

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

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

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

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

Page 3

Received by OCD: 5/14/2021 Form C-141 Page 4	<i>10:15:53 AM</i> State of New Mexico Oil Conservation Division	Page 34 of 314Incident IDDistrict RPFacility IDApplication ID
regulations all operators are re public health or the environme failed to adequately investigat	equired to report and/or file certain release notifient. The acceptance of a C-141 report by the O e and remediate contamination that pose a three	best of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name:		Title:
Signature:	\mathcal{R}	Date:
email:		Telephone:
OCD Only		
Received by:		Date:

Received by OCD: 5/14/2021 10:15:53 AM Form C-141 State of New Mexico

Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

Page 5

Page 6

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: Each of the following items must be included in the closure report. A scaled site and sampling diagram as described in 19.15.29.11 NMAC Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: _____ Title: _____ Signature: Date: Telephone: email: **OCD Only** Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by:	Date:
Printed Name:	Title:

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Appendix B

Released to Imaging: 7/22/2021 11:35:28 AM

Water Well Data Average Depth to Groundwater (ft) White Federal Com #1H Eddy County, New Mexico

_		24	l So	outh		28	28 East			
6	70	5	30	4	30	3	2	55	1	60
7		8	50	9		10	11		12	
						17	20		73	
18		17		16		15	14		13	
		42		29		18	52		34	
19		20		21		22	23		24	
		48								
30		29		28		27	26		25	
31		32		33		34	35		36	

	25 Sc	outh	28	East	
6	5	4 35	3 32	2	1
	59				Site
7	8	9	10	11	12
18	17	16	15 <mark>48</mark>	14	13
67			49		
19	20	21	22	23	24
	96				
30	29	28	27	26 40	25
	15	90			ζ
31	32	33	34	35	36
					40

	26 Sc	outh	28	East	
6	5	4	3	2 120	1 کر
				21	
7	8	9	10	11	12
					100
18	17	16	15	14	13
				120	56
19	20	21	22	23	24
			120		
30	29	28	27	26	25
31	32	33	34	35	36
01	02	00	5	50	00

-	24 Sc	outh	29		
6	5	4	3	2	1
7 160	8	9	10	11	12
18	17 <mark>4</mark>	16 18	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

	25 Sc	outh	29	East		
6 40	5 <mark>65</mark>	4	3	2	1	
	8	9 <mark>60</mark>	10 40	11	12	
لـر 18	17	16 165	15 140 60	14	13	
19	20	21	22 Site	23	24	
30 30	29	28	27	26	25	
31	32 <mark>98</mark>	33	34	35	36	

	26 Sc	outh	29		
6	5 78	4	3	2	1
7	8	9	10	11	12
18	17	16 125	15	14	13
19	20	21	22 57 69	23	24
30 🗸	29	28	27	26	25
31	32	33	34	35	36

_	24 S	outh	30	East	
6	5	4	3	2	1
7	8 186	9	10	11	12
18	17	16	15	14	13
19 231 150	20	21	22	23 400	24
30	29	28	27	26	25
31	32	33	34	35	36

	25 Sc	outh	30		
6	5	4	3	2 295	1
7 <mark>264</mark>	8	9 295	10	11	12 390
18	17	16	15	14	13
19	20	21 265 268	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

	26 Sc	outh	30	East	
6	5 179 180	4	3	2	1
7	8 1 72	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24 180
30	29	28	27	26	25
31	32	33	34	35	36

88 New Mexico State Engineers Well Reports

- **105** USGS Well Reports
- **90** Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6) Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34 NMOCD Groundwater Data
- 123 Tetra Tech installed temporary wells and field water level
- 143 NMOCD Groundwater map well location

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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a	(R=POD replaced, O=orpha C=the fil	ined,		iarti	ers :	are	1=NV	/ 2=NI	7 3=SW	7 4=SE)				
water right file.)	closed)	e is	(1					st to la		,	UTM in meter	rs)	(In feet)	
		POD Sub-		_	Q	_		_	_			_		Water
POD Number <u>C 01337</u>	Code	basin	County ED	64		4	_	Tws 258	Rng 29E	X 591926	Y 3552642*	Depth WellD 180	epthWater C 30	olumn 150
<u>C 01880</u>		С	ED	3		2	06	25S	29E	592161	3558605*	85	40	45
<u>C 02371</u>		С	ED		2	3	15	25S	29E	596741	3555106*	200	60	140
<u>C 02459</u>		С	ED	4	4	1	02	258	29E	598422	3558663*	150		
<u>C 02518</u>		С	ED		3	4	08	258	29E	593895	3556300*	462		
<u>C 02680</u>		CUB	ED		2	3	15	258	29E	596741	3555106*	200		
<u>C 04324 POD10</u>		CUB	ED	1	1	1	09	258	29E	594563	3557603	65	60	5
<u>C 04324 POD11</u>		CUB	ED	1	1	1	09	258	29E	594576	3557619	61	61	0
<u>C 04324 POD12</u>		CUB	ED	2	2	2	08	25S	29E	594476	3557627	65	60	5
<u>C 04324 POD6</u>		CUB	ED	1	1	1	09	25S	29E	594538	3557657	62	61	1
<u>C 04324 POD8</u>		CUB	ED	4	4	4	05	25S	29E	594442	3557807	69	65	4
<u>C 04324 POD9</u>		CUB	ED	1	1	1	09	25S	29E	594590	3557676	72	62	10
										A	Average Depth t	o Water:	55 fe	et
											Minimu	um Depth:	30 fe	et
											M aximu	m Depth:	65 fe	et

PLSS Search:

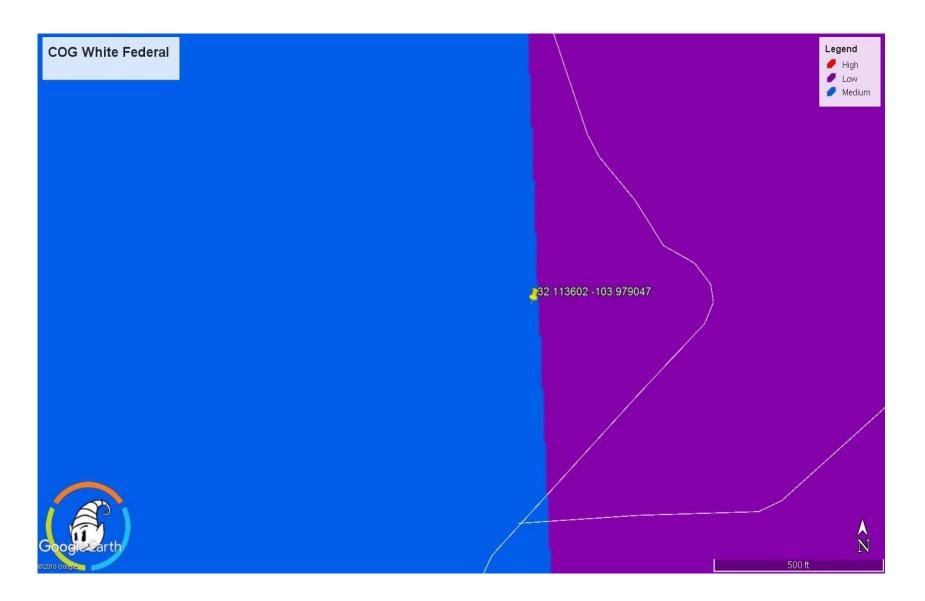
Township: 25S Range: 29E

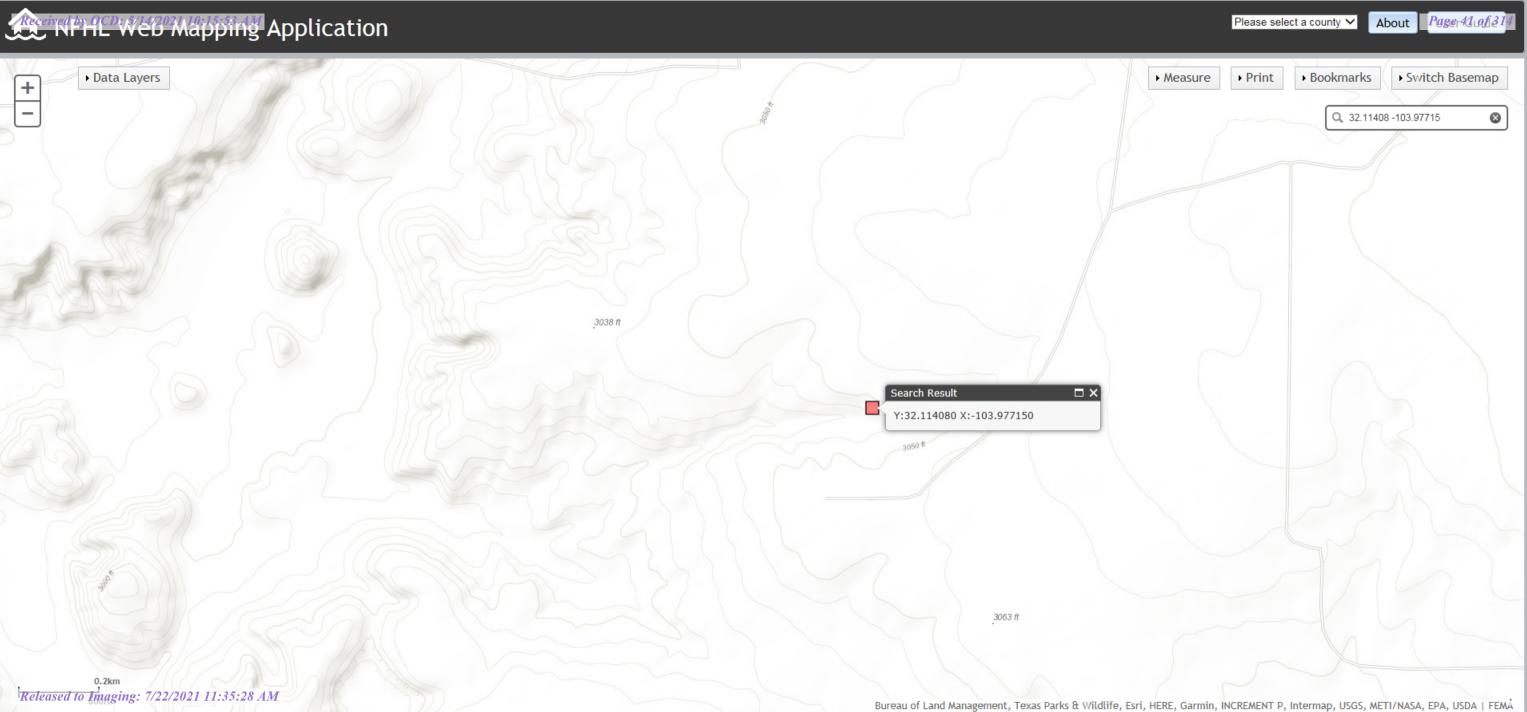
*UTM location was derived from PLSS - see Help

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

11/13/19 9:16 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER





Appendix C

Analytical Report 625280

for Tetra Tech- Midland

Project Manager: Mike Carmona

White Federal 1H Flowline (5-13-19)

212C-MD-01765

30-MAY-19

Collected By: Client





1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429), North Carolina (483)





30-MAY-19



Project Manager: **Mike Carmona Tetra Tech- Midland** 901 West Wall ST Midland, TX 79701

Reference: XENCO Report No(s): **625280 White Federal 1H Flowline (5-13-19)** Project Address: Eddy County, New Mexcio

Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 625280. 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. 625280 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,

Jession Vermer

Jessica Kramer Project Assistant

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Page 2 of 42



Sample Id

AH-1 (0-1')
AH-1 (1'-1.5')
AH-1 (2'-2.5')
AH-1 (2.5'-3')
AH-2 (0-1')
AH-2 (1-1.5')
AH-2 (2-2.5')
AH-3 (0-1')
AH-3 (1'-1.5')
AH-4 (0-1')
AH-4 (1'-1.5')
AH-4 (2'-2.5')
AH-4 (3'-3.5')
AH-5 (0-1')
AH-5 (1'-1.5')
AH-5 (2'-2.5')
AH-5 (3'-3.5')
AH-6 (0-1')
AH-6 (1'-1.5')
AH-6 (2'-2.5')
AH-6 (3'-3.5')
AH-6 (4-4.5')
AH-7 (0-1')
AH-7 (1'-1.5')
AH-7 (2'-2.5')
AH-8 (0-1')
AH-8 (1'-1.5')
AH-8 (2'-2.5')
AH-8 (3'-3.5')
AH-8 (4-4.5')
AH-9 (0-1')
AH-9 (1'-1.5')
AH-9 (2'-2.5')
AH-9 (3'-3.5')
AH-10 (0-1')
AH-10 (1'-1.5')
AH-10 (2'-2.5')
AH-11 (0-1')
AH-11 (1'-1.5')
AH-11 (2'-2.5')
AH-11 (3'-3.5')
AH-12 (0-1')
AH-12 (1'-1.5')

Sample Cross Reference 625280



White Federal 1H Flowline (5-13-19)

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	05-21-19 00:00		625280-001
S	05-21-19 00:00		625280-002
S	05-21-19 00:00		625280-003
S	05-21-19 00:00		625280-004
S	05-21-19 00:00		625280-005
S	05-21-19 00:00		625280-006
S	05-21-19 00:00		625280-007
S	05-21-19 00:00		625280-008
S	05-21-19 00:00		625280-009
S	05-21-19 00:00		625280-010
S	05-21-19 00:00		625280-011
S	05-21-19 00:00		625280-012
S	05-21-19 00:00		625280-013
S	05-21-19 00:00		625280-014
S	05-21-19 00:00		625280-015
S	05-21-19 00:00		625280-016
S	05-22-19 00:00		625280-017
S	05-22-19 00:00		625280-018
S	05-22-19 00:00		625280-019
S	05-22-19 00:00		625280-020
S	05-22-19 00:00		625280-021
S	05-22-19 00:00		625280-022
S	05-22-19 00:00		625280-023
S	05-22-19 00:00		625280-024
S	05-22-19 00:00		625280-025
S	05-22-19 00:00		625280-026
S	05-22-19 00:00		625280-027
S	05-22-19 00:00		625280-028
S	05-22-19 00:00		625280-029
S	05-22-19 00:00		625280-030
S	05-22-19 00:00		625280-031
S	05-22-19 00:00		625280-032
S	05-22-19 00:00		625280-033
S	05-22-19 00:00		625280-034
S	05-22-19 00:00		625280-035
S	05-22-19 00:00		625280-036
S	05-22-19 00:00		625280-037
S	05-22-19 00:00		625280-038
S	05-22-19 00:00		625280-039
S	05-22-19 00:00		625280-040
S	05-22-19 00:00		625280-041
S	05-21-19 00:00		625280-042
S	05-22-19 00:00		625280-043





AH-12 (2'-2.5')
AH-13 (0-1')
AH-13 (1'-1.5')
AH-14 (0-1')
BG-1 (0-1')
BG-2 (0-1')
BG-3 (0-1')
BG-4 (0-1')

Sample Cross Reference 625280



Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5-13-19)

S	05-22-19 00:00	625280-044
S	05-22-19 00:00	625280-045
S	05-22-19 00:00	625280-046
S	05-22-19 00:00	625280-047
S	05-22-19 00:00	625280-048
S	05-22-19 00:00	625280-049
S	05-22-19 00:00	625280-050
S	05-22-19 00:00	625280-051





Client Name: Tetra Tech- Midland Project Name: White Federal 1H Flowline (5-13-19)

Project ID: 212C-MD-01765 Work Order Number(s): 625280 Report Date:30-MAY-19Date Received:05/23/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3090079 Inorganic Anions by EPA 300

Lab Sample ID 625334-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 625280-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3090083 Chloride by EPA 300

Lab Sample ID 625280-041 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 625280-034, -035, -036, -037, -038, -039, -040, -041, -042, -043, -045, -046, -047, -048, -049, -050, -051.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3090390 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3090399 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3090434 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.





Project Location: Eddy County, New Mexcio

Certificate of Analysis Summary 625280

Tetra Tech- Midland, Midland, TX

Project Name: White Federal 1H Flowline (5-13-19)



Date Received in Lab:Thu May-23-19 10:48 amReport Date:30-MAY-19Project Manager:Jessica Kramer

				1								
Lab Id:	625280-0	001	625280-0	02	625280-0	03	625280-0	04	625280-0	05	625280-00	06
Field Id:	AH-1 (0-	-1')	AH-1 (1'-1	.5')	AH-1 (2'-2	2.5')	AH-1 (2.5	-3')	AH-2 (0-	1')	AH-2 (1-1	.5')
Depth:												
Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Sampled:	May-21-19	00:00	May-21-19	00:00	May-21-19 (00:00	May-21-19	00:00	May-21-19 (00:00	May-21-19 0	00:00
Extracted:	May-28-19	15:00							May-28-19	15:00		
Analyzed:	May-28-19	17:35							May-28-19 2	21:23		
Units/RL:	mg/kg	RL							mg/kg	RL		
	< 0.00200	0.00200							< 0.00201	0.00201		
	< 0.00200	0.00200										
	< 0.00200	0.00200							< 0.00201	0.00201		
	< 0.00400	0.00400							< 0.00402	0.00402		
	< 0.00200	0.00200										
	< 0.00200								< 0.00201	0.00201		
	< 0.00200	0.00200							< 0.00201	0.00201		
Extracted:	May-23-19	14:15	May-23-19	4:15	May-23-19	14:15	May-23-19	4:15	May-23-19	14:15	May-23-19 1	4:15
Analyzed:	May-23-19	23:22	May-23-192	23:30	May-23-19 2	23:37	May-23-192	23:44	May-23-19 2	23:52	May-24-19 0	00:21
Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
	4280	25.2	4890	49.6	5600	49.9	7320	50.1	13800	99.6	17600	100
Extracted:	May-26-19	10:00							May-26-19	10:00		
Analyzed:	May-26-19	12:25							May-26-19	13:23		
Units/RL:	mg/kg	RL							mg/kg	RL		
	<15.0	15.0							<15.0	15.0		
	<15.0	15.0								15.0		
Aotor Oil Range Hydrocarbons (MRO)		15.0							<15.0	15.0		
	<15.0	15.0							<15.0	15.0		
	Field Id: Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL: Extracted: Analyzed: Units/RL: Extracted: Analyzed:	Field Id: AH-1 (0. Depth:	Field Id: AH-1 (0-1') Depth: SOIL Matrix: SOIL Sampled: May-21-19 00:00 Extracted: May-28-19 15:00 Analyzed: May-28-19 17:35 Units/RL: mg/kg RL <0.00200	Field Id: AH-1 (0-1') AH-1 (1'-1) Depth: SOIL SOIL Matrix: SOIL May-21-19 00:00 May-21-19 0 Extracted: May-28-19 15:00 May-21-19 0 May-21-19 0 Analyzed: May-28-19 17:35 May-28-19 17:35 May-28-19 17:35 Units/RL: mg/kg RL RL <td< td=""><td>Field Id: AH-1 (0-1') AH-1 (1'-1.5') Depth: SOIL SOIL Matrix: SOIL May-21-19 00:00 May-21-19 00:00 Extracted: May-28-19 15:00 May-21-19 00:00 May-21-19 00:00 Extracted: May-28-19 17:35 May-28-19 17:35 May-28-19 17:35 Units/RL: mg/kg RL RL Image: Comparison of the comparison</td><td>Field Id: AH-1 (0-1') AH-1 (1'-1.5') AH-1 (2'-2 Depth: SOIL SOIL SOIL SOIL Matrix: SOIL May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 Extracted: May-28-19 15:00 May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 Analyzed: May-28-19 17:35 May-28-19 17:35 Image: Soil (Signature (Signa</td><td>Field Id: AH-1 (0-1') AH-1 (1'-1.5') AH-1 (2'-2.5') Depth: SOIL SOIL SOIL Matrix: SOIL SOIL SOIL Sampled: May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 Extracted: May-28-19 15:00 May-28-19 17:35 May-28-19 17:35 Units/RL: mg/kg RL RL RL <0.00200</td> 0.00200 <0.00200</td<>	Field Id: AH-1 (0-1') AH-1 (1'-1.5') Depth: SOIL SOIL Matrix: SOIL May-21-19 00:00 May-21-19 00:00 Extracted: May-28-19 15:00 May-21-19 00:00 May-21-19 00:00 Extracted: May-28-19 17:35 May-28-19 17:35 May-28-19 17:35 Units/RL: mg/kg RL RL Image: Comparison of the comparison	Field Id: AH-1 (0-1') AH-1 (1'-1.5') AH-1 (2'-2 Depth: SOIL SOIL SOIL SOIL Matrix: SOIL May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 Extracted: May-28-19 15:00 May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 Analyzed: May-28-19 17:35 May-28-19 17:35 Image: Soil (Signature (Signa	Field Id: AH-1 (0-1') AH-1 (1'-1.5') AH-1 (2'-2.5') Depth: SOIL SOIL SOIL Matrix: SOIL SOIL SOIL Sampled: May-21-19 00:00 May-21-19 00:00 May-21-19 00:00 Extracted: May-28-19 15:00 May-28-19 17:35 May-28-19 17:35 Units/RL: mg/kg RL RL RL <0.00200	Field Id: AH-1 (0-1') AH-1 (1'-1.5') AH-1 (2'-2.5') AH-1 (2.5') Matrix: SOIL SOIL SOIL SOIL SOIL Sampled: May-21-19 00:00 May-23-19 00:00 May-23-19 00:00 May-23-19 00:00 May-23-19 00:00 May-23-19 14:15 May-23 19 23:37 May-23-19 23:30 </td <td>Field Id: Depth: AH-1 (1·1.5') AH-1 (2·2.5') AH-1 (2.5'-3') Matrix: SOIL SOIL SOIL SOIL Matrix: SOIL SOIL May-21-19 0:00 May-23-19 1:15 May-23-19 1:4:15 May-23-19 2:3:37 May-23-19 2:3:47</td> <td>Field Id: AH-1 (0-1) AH-1 (1'-1.5') AH-1 (2'-2.5') AH-1 (2.5'-3') AH-2 (0-10) Matrix: SOIL SOIL SOIL SOIL SOIL SOIL SOIL Matrix: SOIL May-21-19 00:00 May-22-19 00:00 May-20-19 00:00 May-20-19 May-20-19</td> <td>Field Id: Depth: AH-1 (1⁻¹.5) AH-1 (2⁻².5) AH-1 (2.5-3) AH-1 (2.5-3)</td> <td>Field Id: AH-1 (1 · 1. ·) AH-1 (1 · 1. ·) AH-1 (1 · 1. ·) AH-1 (2. ·) AH-1 (2. ·) AH-2 () AH-2 ()</td>	Field Id: Depth: AH-1 (1·1.5') AH-1 (2·2.5') AH-1 (2.5'-3') Matrix: SOIL SOIL SOIL SOIL Matrix: SOIL SOIL May-21-19 0:00 May-23-19 1:15 May-23-19 1:4:15 May-23-19 2:3:37 May-23-19 2:3:47	Field Id: AH-1 (0-1) AH-1 (1'-1.5') AH-1 (2'-2.5') AH-1 (2.5'-3') AH-2 (0-10) Matrix: SOIL SOIL SOIL SOIL SOIL SOIL SOIL Matrix: SOIL May-21-19 00:00 May-22-19 00:00 May-20-19 00:00 May-20-19 May-20-19	Field Id: Depth: AH-1 (1 ⁻¹ .5) AH-1 (2 ⁻² .5) AH-1 (2.5-3) AH-1 (2.5-3)	Field Id: AH-1 (1 · 1. ·) AH-1 (1 · 1. ·) AH-1 (1 · 1. ·) AH-1 (2. ·) AH-1 (2. ·) AH-2 () AH-2 ()

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.

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Jessica Kramer Project Assistant

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Certificate of Analysis Summary 625280

Tetra Tech- Midland, Midland, TX

Project Name: White Federal 1H Flowline (5-13-19)



Project Id:212C-MD-01765Contact:Mike CarmonaProject Location:Eddy County, New Mexcio

Date Received in Lab:Thu May-23-19 10:48 amReport Date:30-MAY-19Project Manager:Jessica Kramer

	Lab Id:	625280-0	07	625280-0	08	625280-0	09	625280-0	10	625280-0	11	625280-0	012
	Field Id:	AH-2 (2-2	2.5')	AH-3 (0-	1')	AH-3 (1'-1	.5')	AH-4 (0-	1')	AH-4 (1'-1	.5')	AH-4 (2'-2	2.5')
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-21-19 (00:00	May-21-19 (00:00	May-21-19 (00:00	May-21-19	00:00	May-21-19	00:00	May-21-19	00:00
BTEX by EPA 8021B	Extracted:			May-28-19 1	15:00			May-28-19	15:00				
	Analyzed:			May-28-19 2	21:42			May-28-192	22:01				
	Units/RL:			mg/kg	RL			mg/kg	RL				
Benzene				< 0.00200	0.00200			< 0.00201	0.00201				
Toluene				< 0.00200	0.00200			< 0.00201	0.00201				
Ethylbenzene				< 0.00200	0.00200			< 0.00201	0.00201				
m,p-Xylenes				< 0.00400	0.00400			< 0.00402	0.00402				
o-Xylene				< 0.00200	0.00200			< 0.00201	0.00201				
Total Xylenes				< 0.00200	0.00200			< 0.00201	0.00201				
Total BTEX				< 0.00200	0.00200			< 0.00201	0.00201				
Chloride by EPA 300	Extracted:	May-23-19	14:15	May-23-19 1	4:15	May-23-19 1	4:15	May-23-19	14:15	May-23-19	14:15	May-23-19	14:15
	Analyzed:	May-24-19	00:28	May-24-19 (00:50	May-24-19 0	00:57	May-24-19	01:04	May-23-19	23:59	May-24-19	01:11
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		10200	49.9	11400	99.0	11800	101	5220	49.8	526	4.95	582	5.05
TPH by SW8015 Mod	Extracted:			May-26-19 1	10:00			May-26-19	10:00				
	Analyzed:			May-26-19 1	13:43			May-26-19	14:02				
	Units/RL:			mg/kg	RL			mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)				<15.0	15.0			<15.0	15.0				
Diesel Range Organics (DRO)				<15.0	15.0			<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)				<15.0	15.0			<15.0	15.0				
Total TPH				<15.0	15.0			<15.0	15.0				

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Jessica Kramer Project Assistant

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Certificate of	[•] Analys	sis Summarv	625280

Project Name: White Federal 1H Flowline (5-13-19)



Project Id:212C-MD-01765Contact:Mike CarmonaProject Location:Eddy County, New Mexcio

Date Received in Lab: Thu May-23-19 10:48 am Report Date: 30-MAY-19 Project Manager: Jessica Kramer

					1		1			1			
	Lab Id:	625280-0	013	625280-0	14	625280-0	15	625280-0)16	625280-0	17	625280-0	018
Analysis Requested	Field Id:	AH-4 (3'-3	3.5')	AH-5 (0-	1')	AH-5 (1'-1	.5')	AH-5 (2'-2	2.5')	AH-5 (3'-3	3.5')	AH-6 (0-	-1')
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-21-19	00:00	May-21-19 (00:00	May-21-19 0	00:00	May-21-19	00:00	May-22-19	00:00	May-22-19	00:00
BTEX by EPA 8021B	Extracted:			May-28-19	15:00							May-28-19	15:00
	Analyzed:			May-28-19 2	22:20							May-28-19	22:39
	Units/RL:			mg/kg	RL							mg/kg	RL
Benzene				< 0.00199	0.00199							< 0.00202	0.00202
Toluene				< 0.00199	0.00199							< 0.00202	0.00202
Ethylbenzene				< 0.00199	0.00199							< 0.00202	0.00202
m,p-Xylenes				< 0.00398	0.00398							< 0.00403	0.00403
o-Xylene				< 0.00199	0.00199							< 0.00202	0.00202
Total Xylenes					0.00199							< 0.00202	0.00202
Total BTEX				< 0.00199	0.00199							< 0.00202	0.00202
Chloride by EPA 300	Extracted:	May-23-19	14:15	May-23-19	14:15	May-23-19 1	4:15	May-23-19	15:00	May-23-19	15:00	May-23-19	15:00
	Analyzed:	May-24-19	01:19	May-24-19 (01:26	May-24-19 0	01:33	May-24-19	02:38	May-24-19	02:46	May-24-19	02:53
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		338	4.96	17800	100	15600	100	8170	49.5	1450	5.02	15100	99.6
TPH by SW8015 Mod	Extracted:			May-26-19	10:00							May-26-19	10:00
	Analyzed:			May-26-19	14:21							May-26-19	14:41
	Units/RL:			mg/kg	RL							mg/kg	RL
Gasoline Range Hydrocarbons (GRO)				<15.0	15.0							<15.0	15.0
Diesel Range Organics (DRO)				<15.0	15.0							<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)				<15.0	15.0							<15.0	15.0
Total TPH				<15.0	15.0							<15.0	15.0

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Jessica Kramer Project Assistant

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Certificate of	Analys	is Summary	625280
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Project Name: White Federal 1H Flowline (5-13-19)



Project Id:212C-MD-01765Contact:Mike CarmonaProject Location:Eddy County, New Mexcio

Date Received in Lab:Thu May-23-19 10:48 amReport Date:30-MAY-19Project Manager:Jessica Kramer

	Lab Id:	625280-0)19	625280-0	20	625280-0	21	625280-0	022	625280-0	23	625280-0	24
Analysis Requested	Field Id:	AH-6 (1'-	1.5')	AH-6 (2'-2	.5')	AH-6 (3'-3	3.5')	AH-6 (4-4	4.5')	AH-7 (0-	1')	AH-7 (1'-1	.5')
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-22-19	00:00	May-22-19 (00:00	May-22-19 (00:00	May-22-19	00:00	May-22-19	00:00	May-22-19 (00:00
BTEX by EPA 8021B	Extracted:									May-28-19	15:00		
	Analyzed:									May-28-192	22:58		
	Units/RL:									mg/kg	RL		
Benzene										< 0.00199	0.00199		
Toluene										< 0.00199	0.00199		
Ethylbenzene										< 0.00199	0.00199		
m,p-Xylenes										< 0.00398	0.00398		
o-Xylene										< 0.00199	0.00199		
Total Xylenes										< 0.00199	0.00199		
Total BTEX										< 0.00199	0.00199		
Chloride by EPA 300	Extracted:	May-23-19	15:00	May-23-19 1	15:00	May-23-19 1	15:00	May-23-19	15:00	May-23-19	15:00	May-23-19	15:00
	Analyzed:	May-24-19	03:00	May-24-19 (03:22	May-24-19 ()3:29	May-24-19	03:36	May-24-19 (03:44	May-24-19 ()3:51
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		947	5.05	19000	100	20100	101	16600	99.6	19900	251	12500	99.0
TPH by SW8015 Mod	Extracted:				ĺ		ĺ			May-26-19	10:00		
	Analyzed:									May-26-19	15:02		
	Units/RL:									mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)										<15.0	15.0		
Diesel Range Organics (DRO)										<15.0	15.0		
Motor Oil Range Hydrocarbons (MRO)										<15.0	15.0		
Total TPH										<15.0	15.0		

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Jessica Kramer Project Assistant

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Certificate of Analy	sis Summary	625280
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Project Name: White Federal 1H Flowline (5-13-19)



Project Id:212C-MD-01765Contact:Mike CarmonaProject Location:Eddy County, New Mexcio

Date Received in Lab: Thu May-23-19 10:48 am Report Date: 30-MAY-19 Project Manager: Jessica Kramer

	Lab Id:	625280-0	25	625280-0)26	625280-0	27	625280-0	128	625280-0	29	625280-0	30
	Field Id:	AH-7 (2'-2		AH-8 (0-		AH-8 (1'-1		AH-8 (2'-2	-	AH-8 (3'-3	-	AH-8 (4-4	
Analysis Requested		An-7 (2-2	2.3)	AH-8 (0-	.1)	An-o (1 -1	.5)	An-o (2 -2	2.5)	Ап-о (3		An-o (4-4	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-22-19	00:00	May-22-19	00:00	May-22-19 (00:00	May-22-19	00:00	May-22-19	00:00	May-22-19 (00:00
BTEX by EPA 8021B	Extracted:			May-28-19	15:00								
	Analyzed:			May-28-19	23:17								
	Units/RL:			mg/kg	RL								
Benzene				< 0.00199	0.00199								
Toluene				< 0.00199	0.00199								
Ethylbenzene				< 0.00199	0.00199								
m,p-Xylenes				< 0.00398	0.00398								
o-Xylene				< 0.00199	0.00199								
Total Xylenes				< 0.00199	0.00199								
Total BTEX				< 0.00199	0.00199								
Chloride by EPA 300	Extracted:	May-23-19	15:00	May-23-19	15:00	May-23-19 1	5:00	May-23-19	15:00	May-23-19	15:00	May-23-19	15:00
	Analyzed:	May-24-19	04:20	May-24-19	04:27	May-24-19 (04:49	May-24-19	04:56	May-24-19	05:03	May-24-19 (05:11
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		12100	99.6	18800	252	22300	248	1400	25.0	5010	24.9	3180	25.1
TPH by SW8015 Mod	Extracted:			May-26-19	10:00								
	Analyzed:			May-26-19	15:23								
	Units/RL:			mg/kg	RL								
Gasoline Range Hydrocarbons (GRO)				<15.0	15.0								
Diesel Range Organics (DRO)				21.1	15.0								
Motor Oil Range Hydrocarbons (MRO)				<15.0	15.0								
Total TPH				21.1	15.0								

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Contact:Mike CarmonaProject Location:Eddy County, New Mexcio

Certificate of Analysis Summary 625280

Tetra Tech- Midland, Midland, TX

Project Name: White Federal 1H Flowline (5-13-19)



Date Received in Lab:Thu May-23-19 10:48 amReport Date:30-MAY-19Project Manager:Jessica Kramer

	Lab Id:	625280-0	031	625280-0	32	625280-03	33	625280-0	34	625280-0)35	625280-0	36
Anglucia Deguested	Field Id:	AH-9 (0-	-1')	AH-9 (1'-1	.5')	AH-9 (2'-2	.5')	AH-9 (3'-3	3.5')	AH-10 (0	-1')	AH-10 (1'-	1.5')
Analysis Requested	Depth:												
	Matrix:	SOIL	,	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-22-19	00:00	May-22-19 (00:00	May-22-19 0	00:00	May-22-19	00:00	May-22-19	00:00	May-22-19	00:00
BTEX by EPA 8021B	Extracted:	May-28-19	15:00							May-28-19	15:00		
	Analyzed:	May-28-19	23:36							May-28-19	23:55		
	Units/RL:	mg/kg	RL							mg/kg	RL		
Benzene		< 0.00200	0.00200							<0.00201	0.00201		
Toluene		< 0.00200	0.00200							<0.00201	0.00201		
Ethylbenzene		< 0.00200	0.00200							<0.00201	0.00201		
m,p-Xylenes		< 0.00400	0.00400							< 0.00402	0.00402		
o-Xylene		< 0.00200	0.00200							<0.00201	0.00201		
Total Xylenes		< 0.00200	0.00200							<0.00201	0.00201		
Total BTEX		< 0.00200	0.00200							< 0.00201	0.00201		
Chloride by EPA 300	Extracted:	May-23-19	15:00	May-23-19 1	5:00	May-23-19 1	5:00	May-23-19	15:30	May-23-19	15:30	May-23-19	15:30
	Analyzed:	May-24-19	05:18	May-24-19 0	5:25	May-24-19 0	5:32	May-23-19	19:29	May-23-19	19:34	May-23-19	19:39
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		6250	50.0	19100	100	19600	100	9250	50.4	8560	49.6	17500	99.8
TPH by SW8015 Mod	Extracted:	May-26-19	10:00							May-26-19	10:00		
	Analyzed:	May-26-19	15:43							May-26-19	16:03		
	Units/RL:	mg/kg	RL							mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0							<15.0	15.0		
Diesel Range Organics (DRO)		36.8	15.0							<15.0	15.0		
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0							<15.0	15.0		
Total TPH		36.8	15.0							<15.0	15.0		

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Jessica Kramer Project Assistant

Final 1.000



212C-MD-01765

Eddy County, New Mexcio

Mike Carmona

Project Id:

Project Location:

Contact:

Certificate of An	alysis Summary	625280
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Tetra Tech- Midland, Midland, TX

Project Name: White Federal 1H Flowline (5-13-19)



Date Received in Lab:Thu May-23-19 10:48 amReport Date:30-MAY-19Project Manager:Jessica Kramer

	Lab Id:	625280-0	727	625280-0	20	625280-0	20	625280-0	40	625280-0	41	625280-	042
Analysis Requested	Field Id:	AH-10 (2'-	2.5')	AH-11 (0-	-1')	AH-11 (1'-	1.5')	AH-11 (2'-	2.5')	AH-11 (3'-	3.5')	AH-12 (0)-1')
1	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-22-19	00:00	May-22-19	00:00	May-22-19 (00:00	May-22-19	00:00	May-22-19	00:00	May-21-19	00:00
BTEX by EPA 8021B	Extracted:			May-28-19	15:00		ľ					May-28-19	16:00
	Analyzed:			May-29-19 (00:14							May-29-19	03:22
	Units/RL:			mg/kg	RL							mg/kg	RL
Benzene				< 0.00200	0.00200							< 0.00201	0.00201
Toluene				< 0.00200	0.00200							< 0.00201	0.00201
Ethylbenzene				< 0.00200	0.00200							< 0.00201	0.00201
m,p-Xylenes				< 0.00399	0.00399							< 0.00402	0.00402
o-Xylene				< 0.00200	0.00200							< 0.00201	0.00201
Total Xylenes				< 0.00200	0.00200							< 0.00201	0.00201
Total BTEX				< 0.00200	0.00200							< 0.00201	0.00201
Chloride by EPA 300	Extracted:	May-23-19	15:30	May-23-19 15:30		May-23-19 1	15:30	May-23-19	May-23-19 15:30 May-23-1		15:30	May-23-19	15:30
	Analyzed:	May-23-19	19:14	May-23-19	19:44	May-23-19 1	19:59	May-23-19	20:04	May-23-192	20:24	May-23-19	20:09
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		564	5.02	6730	49.7	3020	25.2	190	4.99	1120	4.99	6230	50.3
TPH by SW8015 Mod	Extracted:			May-26-19	10:00		ĺ					May-26-19	10:00
	Analyzed:			May-26-19	16:43							May-26-19	17:03
	Units/RL:			mg/kg	RL							mg/kg	RL
Gasoline Range Hydrocarbons (GRO)				<15.0	15.0							<15.0	15.0
Diesel Range Organics (DRO)				20.5	15.0							15.7	15.0
Motor Oil Range Hydrocarbons (MRO)				<15.0	15.0							<15.0	15.0
Total TPH				20.5	15.0							15.7	15.0

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Jessica Kramer Project Assistant

Final 1.000



Project Name: White Federal 1H Flowline (5-13-19)



Project Id:212C-MD-01765Contact:Mike CarmonaProject Location:Eddy County, New Mexcio

Date Received in Lab:Thu May-23-19 10:48 amReport Date:30-MAY-19Project Manager:Jessica Kramer

	Lab Id:	625280-0)43	625280-0	44	625280-0)45	625280-0	46	625280-	047	625280-	048
An alugia Dogwootod	Field Id:	AH-12 (1'-	1.5')	AH-12 (2'-	2.5')	AH-13 (0	-1')	AH-13 (1'-	1.5')	AH-14 (0)-1')	BG-1 (0	-1')
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	.	SOIL	
	Sampled:	May-22-19	00:00	May-22-19	00:00	May-22-19	00:00	May-22-19	00:00	May-22-19	00:00	May-22-19	00:00
BTEX by EPA 8021B	Extracted:					May-28-19	16:00			May-28-19	16:00	May-28-19	15:15
	Analyzed:					May-29-19	03:41			May-29-19	04:00	May-28-19	17:27
	Units/RL:					mg/kg	RL			mg/kg	RL	mg/kg	RL
Benzene						< 0.00200	0.00200			< 0.00201	0.00201	< 0.00198	0.00198
Toluene						< 0.00200	0.00200			< 0.00201	0.00201	< 0.00198	0.00198
Ethylbenzene						< 0.00200	0.00200			< 0.00201	0.00201	< 0.00198	0.00198
m,p-Xylenes							0.00399			< 0.00402	0.00402	< 0.00397	0.00397
o-Xylene						< 0.00200	0.00200			< 0.00201	0.00201	< 0.00198	0.00198
Total Xylenes						< 0.00200	0.00200			< 0.00201	0.00201	< 0.00198	0.00198
Total BTEX						< 0.00200	0.00200			< 0.00201	0.00201	< 0.00198	0.00198
Chloride by EPA 300	Extracted:	May-23-19 15:30		May-23-19 15:30		May-23-19	15:30	May-23-19	15:30	May-23-19	15:30	May-23-19	15:30
	Analyzed:	May-23-19	20:14	May-23-192	20:19	May-25-19 11:53		May-23-19 20:43		May-23-19 20:58		May-23-19 21:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		7010	49.8	6030	50.0	6090	25.0	8470	50.3	2730	24.8	213	4.97
TPH by SW8015 Mod	Extracted:					May-26-19	10:00			May-26-19	10:00	May-26-19	10:00
	Analyzed:					May-26-19	17:23			May-26-19	17:42	May-26-19	18:03
	Units/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
Diesel Range Organics (DRO)						17.9	15.0			34.7	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)						<15.0	15.0			<15.0	15.0	<15.0	15.0
Total TPH						17.9	15.0			34.7	15.0	<15.0	15.0

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Jessica Kramer Project Assistant





Project Id:	212C-MD-01765
Contact:	Mike Carmona
Project Location:	Eddy County, New Mexcio

Certificate of Analysis Summary 625280

Tetra Tech- Midland, Midland, TX

Project Name: White Federal 1H Flowline (5-13-19)



Date Received in Lab:Thu May-23-19 10:48 amReport Date:30-MAY-19Project Manager:Jessica Kramer

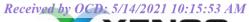
1		1		1					
Lab Id:	625280-0	049	625280-0	050	625280-0	051			
Field Id:	BG-2 (0-	-1')	BG-3 (0-	-1')	BG-4 (0-	-1')			
Depth:									
Matrix:	SOIL	,	SOIL		SOIL				
Sampled:	May-22-19	00:00	May-22-19	00:00	May-22-19	00:00			
Extracted:	May-28-19	15:15	May-28-19	15:15	May-28-19	15:15			
Analyzed:	May-28-19	17:46	May-28-19	21:13	May-28-19	21:32			
Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202			
	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202			
	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202			
	< 0.00402	0.00402	< 0.00398	0.00398	< 0.00404	0.00404			
	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202			
	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202			
	< 0.00201	0.00201	< 0.00199	0.00199	< 0.00202	0.00202			
Extracted:	May-23-19	15:30	May-23-19	15:30	May-23-19	15:30			
Analyzed:	May-23-19	21:08	May-23-19	21:13	May-23-19	21:18			
Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
	138	4.95	153	4.95	24.3	4.95			
Extracted:	May-26-19	10:00	May-26-19	10:00	May-29-19	11:00			
Analyzed:	May-26-19	18:22	May-26-19	18:42	May-29-19	20:28			
Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
	<15.0	15.0	<15.0	15.0	<15.0	15.0			
	<15.0	15.0	<15.0	15.0	<15.0	15.0			
	<15.0	15.0	<15.0	15.0	<15.0	15.0			
	<15.0	15.0	<15.0	15.0	<15.0	15.0			
	Field Id: Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL: Extracted: Analyzed: Units/RL: Extracted: Analyzed:	Field Id: BG-2 (0 Depth: Matrix: SOIL Sampled: May-22-19 Extracted: May-28-19 Analyzed: May-28-19 Units/RL: mg/kg <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 <0.00201 May-23-19 Manalyzed: May-26-19 Manalyzed: May-26-19 Manalyzed: May-26-19 Units/RL: mg/kg <15.0 <15	Field Id: BG-2 (0-1') Depth: SOIL Matrix: SOIL Sampled: May-22-19 00:00 Extracted: May-28-19 15:15 Analyzed: May-28-19 17:46 Units/RL: mg/kg RL <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 <0.00201 0.00201 May-23-19 21:08	Field Id: BG-2 (0-1') BG-3 (0-1) Depth: Matrix: SOIL SOIL Sampled: May-22-19 00:00 May-22-19 Extracted: May-28-19 15:15 May-28-19 Analyzed: May-28-19 17:46 May-28-19 Units/RL: mg/kg RL mg/kg 0	Field Id: BG-2 (0-1') BG-3 (0-1') Depth: SOIL SOIL Matrix: SOIL May-22-19 00:00 May-22-19 00:00 Extracted: May-28-19 15:15 May-28-19 15:15 May-28-19 15:15 Analyzed: May-28-19 17:46 May-28-19 21:13 Units/RL: mg/kg RL mg/kg RL 0.00201 0.00201 0.00199 0.00201 0.00201 0.00199 0.00201 0.00201 0.00199 0.00199 May-23-19 0.00199 0.00199 0.00201 0.00201 0.00199 0.00199 May-23-19 May-23-19 May-23-19 May-23-19 May-23-19 May-23-19 <	Field Id: BG-2 (0-1') BG-3 (0-1') BG-4 (0-1) Depth: SOIL SOIL SOIL SOIL Matrix: SOIL May-22-19 00:00 May-22-19 00:00 May-22-19 Extracted: May-28-19 15:15 May-28-19 15:15 May-28-19 15:15 May-28-19 Analyzed: May-28-19 17:46 May-28-19 113 May-28-19 Units/RL: mg/kg RL mg/kg RL mg/kg 0.00201 0.00201 <0.00199	Field Id: BG-2 (0-1') BG-3 (0-1') BG-4 (0-1') Depth: SOIL SOIL SOIL SOIL Matrix: SOIL SOIL SOIL SOIL Sampled: May-22-19 00:00 May-22-19 00:00 May-22-19 00:00 May-22-19 00:00 Extracted: May-28-19 15:15 May-28-19 15:15 May-28-19 15:15 May-28-19 21:32 Units/RL: mg/kg RL mg/kg RL mg/kg RL mg/kg RL 0.00201 0.00199 0.00199 0.00199 May-28-19 15:15 May-28-19 15:15 Analyzed: May-28-19 15:10 May-28-19 15:17 May-2001 0.00201 <	Field Id: BG-2 (0-1') BG-3 (0-1') BG-4 (0-1') Depth: BG-3 (0-1') BG-4 (0-1') Matrix: SOIL SOIL Sampled: May-22-19 0:00 May-22-19 0:00 May-22-19 0:00 Extracted: May-28-19 15:15 May-28-19 15:15 May-28-19 15:15 Analyzed: May-28-19 17:46 May-28-19 21:13 May-28-19 21:32 Units/RL: mg/kg RL mg/kg RL mg/kg RL < <0.00201 0.00201 <0.00199 0.00199 <0.00202 0.00202 < <<0.00201 0.00201 <0.00199 0.00199 <0.00202 0.00202 < <<0.00201 0.00201 <0.00199 0.00199 <0.00202 0.00202 < <<0.00201 0.00201 <0.00199 0.00199 <0.00202 0.00202 < <<0.00201 0.00201 <0.00199 0.0199 <0.00202 0.00202 < <<0.00201 0.00201 <0.00199 0.0199 <0.00202 0.00202 < <<0.00201 <0.00199 0.0199	Field Id: BG-2 (0-1) BG-3 (0-1) BG-4 (0-1) Depth: SOIL SOIL SOIL Matrix: SOIL May-22-19 00:00 May-22-19 00:00 May-22-19 00:00 Extracted: May-28-19 15:15 May-28-19 15:15 May-28-19 15:15 May-28-19 21:32 Units/RL: mg/kg RL mg/kg RL mg/kg RL -0.00201 0.00201 -0.00199 0.00199 -0.00202 0.00202 -0.00201 0.00201 -0.00199 0.00199 -0.00202 0.00202 -0.00201 0.00201 -0.00199 0.00199 -0.00202 0.00202 -0.00201 0.00201 -0.00199 0.00199 -0.00202 0.00202 -0.00201 0.00201 -0.00199 0.00199 -0.00202 0.00202 -0.00201 0.00201 -0.00199 0.00199 -0.00202 0.00202 -0.00201 0.00201 -0.00199 0.00199 -0.00202 0.00202 -0.00201 0.00201 -0.00199 0.00199 -0.00202 0.00202 -0.00201 0.0

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

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

fession kramer

Jessica Kramer Project Assistant



LABORATORIES

Flagging Criteria



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- 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 LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

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



Work Or Lab Batch #	ders : 62528 #: 3090431	0, Sample: 625280-001 / SMP	Batcl	-	: 212C-MD-0 : Soil)1765				
Units:	mg/kg	Date Analyzed: 05/26/19 12:25	SU	RROGATE RECOVERY STUDY						
	TPH	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
		Analytes			[D]					
1-Chloroocta	ane		90.0	99.8	90	70-135				
o-Terphenyl			44.0	49.9	88	70-135				
Lab Batch #	#: 3090431	Sample: 625280-005 / SMP	Batch	h: 1 Matrix	: Soil					
Units:	mg/kg	Date Analyzed: 05/26/19 13:23	SU	RROGATE R	ECOVERY	STUDY				
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
1-Chloroocta	ane		94.2	99.7	94	70-135				
o-Terphenyl			46.3	49.9	93	70-135				
Lab Batch #		Sample: 625280-008 / SMP	Batcl			70-155				
Units:	mg/kg	Date Analyzed: 05/26/19 13:43		RROGATE R		STUDY				
			Amount	True		Control				
	TPH	by SW8015 Mod Analytes	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flags			
1-Chloroocta	ane		93.0	99.8	93	70-135				
o-Terphenyl			46.2	49.9	93	70-135				
Lab Batch #		Sample: 625280-010 / SMP	Batcl			10 100				
Units:	mg/kg	Date Analyzed: 05/26/19 14:02		RROGATE R		STUDY				
	TPH	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
		Analytes			[D]					
1-Chloroocta			91.4	99.9	91	70-135				
o-Terphenyl			44.8	50.0	90	70-135				
Lab Batch #	#: 3090431	Sample: 625280-014 / SMP	Batch	h: 1 Matrix	: Soil					
U nits:	mg/kg	Date Analyzed: 05/26/19 14:21	SU	RROGATE R	ECOVERY	STUDY				
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags			
				1						
1-Chloroocta	ane		91.5	99.9	92	70-135				

* 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: 62528 : 3090431	Sample: 625280-018 / SMP	Bate		: 212C-MD-0 :: Soil						
U nits:	mg/kg	Date Analyzed: 05/26/19 14:41	SURROGATE RECOVERY STUDY								
	TPH	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
		Analytes			[D]						
1-Chloroocta	ne		88.4	100	88	70-135					
o-Terphenyl			43.7	50.0	87	70-135					
Lab Batch #	: 3090431	Sample: 625280-023 / SMP	Bate	ch: 1 Matrix	: Soil						
Units:	mg/kg	Date Analyzed: 05/26/19 15:02	SU	URROGATE R	ECOVERY	STUDY					
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage				
1-Chloroocta	ne		91.4	99.8	92	70-135					
o-Terphenyl			45.0	49.9	90	70-135					
Lab Batch #	: 3090431	Sample: 625280-026 / SMP	Bate								
Units:	mg/kg	Date Analyzed: 05/26/19 15:23	SU	URROGATE R	ECOVERY	STUDY					
	TPH	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage				
		Analytes	[]	[_]	[D]	,					
1-Chlorooctar	ne		87.3	99.7	88	70-135					
o-Terphenyl			43.0	49.9	86	70-135					
Lab Batch #	: 3090431	Sample: 625280-031 / SMP	Bate	ch: 1 Matrix	: Soil						
Units:	mg/kg	Date Analyzed: 05/26/19 15:43	SU	URROGATE R	ECOVERY	STUDY					
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chloroocta	ne		90.5	99.7	91	70-135					
o-Terphenyl			44.6	49.9	89	70-135					
Lab Batch #	: 3090431	Sample: 625280-035 / SMP	Bate	ch: 1 Matrix	: Soil						
Units:	mg/kg	Date Analyzed: 05/26/19 16:03	SU	URROGATE R	ECOVERY	STUDY					
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage				
1-Chloroocta	ne	· · · · · · · · · · · · · · · · · · ·	91.4	99.9	91	70-135					
		I									
o-Terphenyl			44.4	50.0	89	70-135					

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

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Work Orders : 625280,

Form 2 - Surrogate Recoveries

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	ruers: 02328 1#: 3090431	Sample: 625280-038 / SMP	Batch	0	Soil	11705	
Units:	mg/kg	Date Analyzed: 05/26/19 16:43	SU	RROGATE R	ECOVERY S	STUDY	
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	tane		92.2	99.9	92	70-135	
o-Terpheny	/1		45.1	50.0	90	70-135	
Lab Batch	#: 3090431	Sample: 625280-042 / SMP	Batcl	n: 1 Matrix	Soil		
Units:	mg/kg	Date Analyzed: 05/26/19 17:03	SU	RROGATE R	ECOVERY S	STUDY	
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	tana	Anarytes	92.9	99.8	93	70-135	
o-Terpheny			45.9	49.9	93		
	#: 3090431	Sample: 625280-045 / SMP	45.9 Batcl			70-135	
Units:		•					
Units:	mg/kg	Date Analyzed: 05/26/19 17:23	SU	RROGATE R	ECOVERYS	STUDY	
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	tane		93.2	100	93	70-135	
o-Terpheny			46.1	50.0	92	70-135	
	#: 3090431	Sample: 625280-047 / SMP	Batcl		-	70-155	
Units:	mg/kg	Date Analyzed: 05/26/19 17:42		RROGATE R		STUDY	
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	tane		92.2	100	92	70-135	
o-Terpheny	<i>i</i> l		45.4	50.0	91	70-135	
Lab Batch	#: 3090431	Sample: 625280-048 / SMP	Batcl	n: 1 Matrix	Soil	1	
Units:	mg/kg	Date Analyzed: 05/26/19 18:03	SU	RROGATE R	ECOVERY S	STUDY	
	TPH	by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooc	tane	•	92.6	99.7	93	70-135	
o-Terpheny	/1		45.5	49.9	91	70-135	

* 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 #: 3	8090431	Sample: 625280-049 / SMP	Bato	h: 1 Matrix	: Soil					
U nits: n	ng/kg	Date Analyzed: 05/26/19 18:22	SURROGATE RECOVERY STUDY							
	TPH I	oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage			
		Analytes			[D]					
1-Chlorooctane			92.2	99.9	92	70-135				
o-Terphenyl			44.4	50.0	89	70-135				
Lab Batch #: 3	8090431	Sample: 625280-050 / SMP	Bato	h: 1 Matrix	: Soil					
Units: n	ng/kg	Date Analyzed: 05/26/19 18:42	SU	JRROGATE R	ECOVERY S	STUDY				
	TPH b	oy SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag			
1-Chlorooctane		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 	93.1	99.8	93	70-135				
o-Terphenyl			45.1	49.9	90	70-135				
Lab Batch #: 3	8090399	Sample: 625280-048 / SMP	Bato	h: 1 Matrix	: Soil					
Units: n	ng/kg	Date Analyzed: 05/28/19 17:27	SU	JRROGATE R	ECOVERY	STUDY				
	ВТЕХ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag			
		Analytes			[D]					
1,4-Difluorobenz	zene		0.0291	0.0300	97	70-130				
4-Bromofluorobe	enzene		0.0342	0.0300	114	70-130				
Lab Batch #: 3	8090390	Sample: 625280-001 / SMP	Bato	h: 1 Matrix	: Soil					
Units: n	ng/kg	Date Analyzed: 05/28/19 17:35	SU	JRROGATE R	ECOVERY S	STUDY				
	BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag			
1,4-Difluorobenz	zene		0.0306	0.0300	102	70-130				
4-Bromofluorobe	enzene		0.0277	0.0300	92	70-130				
Lab Batch #: 3	8090399	Sample: 625280-049 / SMP	Bato	h: 1 Matrix	: Soil					
Units: n	ng/kg	Date Analyzed: 05/28/19 17:46	SU	JRROGATE R	ECOVERY S	STUDY				
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag			
1,4-Difluorobenz			0.0290	0.0300	97	70-130				

* 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



	r ders : 625280 #: 3090399	0, Sample: 625280-050 / SMP	Batch		: 212C-MD-0 : Soil)1765	
U nits:	mg/kg	Date Analyzed: 05/28/19 21:13	SU	RROGATE R	ECOVERY	STUDY	
	BTEX	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluoro	obenzene		0.0283	0.0300	94	70-130	
4-Bromoflue			0.0338	0.0300	113	70-130	
Lab Batch	#: 3090390	Sample: 625280-005 / SMP	Batch	n: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/28/19 21:23	SU	RROGATE R	ECOVERY	STUDY	
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluoro		Anarytes	0.0298	0.0300	99	70-130	
4-Bromoflue	orobenzene		0.0288	0.0300	96	70-130	
Lab Batch	#: 3090399	Sample: 625280-051 / SMP	Batch			10 100	
Units:	mg/kg	Date Analyzed: 05/28/19 21:32	SU	RROGATE R	ECOVERY	STUDY	
	DTEV	X by EPA 8021B	Amount	True		Control	
		Analytes	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flags
1,4-Difluoro			0.0285	0.0300	95	70-130	
4-Bromoflue	orobenzene		0.0351	0.0300	117	70-130	
Lab Batch	#: 3090390	Sample: 625280-008 / SMP	Batch	n: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/28/19 21:42	SU	RROGATE R	ECOVERY	STUDY	
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluoro	obenzene		0.0302	0.0300	101	70-130	
4-Bromoflue	orobenzene		0.0281	0.0300	94	70-130	
Lab Batch	#: 3090390	Sample: 625280-010 / SMP	Batch	n: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/28/19 22:01	SU	RROGATE R	ECOVERY	STUDY	
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
					1	1	
1,4-Difluoro			0.0307	0.0300	102	70-130	

* 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: 625280, Lab Batch #: 3090390

Form 2 - Surrogate Recoveries

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Flags

Flags

Flags

Units:	mg/kg	Date Analyzed: 05/28/19 22:20	SU	JRROGATE RI	ECOVERY	STUDY
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
1,4-Difluor	obenzene		0.0318	0.0300	106	70-130
4-Bromoflu	iorobenzene		0.0315	0.0300	105	70-130
Lab Batch	#: 3090390	Sample: 625280-018 / SMP	Bate	h: 1 Matrix:	Soil	
Units:	mg/kg	Date Analyzed: 05/28/19 22:39	SU	JRROGATE RI	ECOVERY	STUDY
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R
1,4-Difluor	obenzene		0.0315	0.0300	105	70-130
4-Bromoflu	iorobenzene		0.0304	0.0300	101	70-130
Lab Batch	#: 3090390	Sample: 625280-023 / SMP	Bate	h: 1 Matrix:	Soil	1
Units:	mg/kg	Date Analyzed: 05/28/19 22:58	SU	JRROGATE RI	ECOVERY S	STUDY
	BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R

Sample: 625280-014 / SMP

Anal	lytes			[D]		
1,4-Difluorobenzene		0.0313	0.0300	104	70-130	
4-Bromofluorobenzene		0.0305	0.0300	102	70-130	
Lab Batch #: 3090390	Sample: 625280-026 / SMP	Batch	n: 1 Matrix:	Soil		U

Units: mg/kg

Date Analyzed: 05/28/19 23:17

SURROGATE RECOVERY STUDY Amount True Control

	by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	Analytes	0.0312	0.0300	104	70-130	
4-Bromofluorobenzene		0.0288	0.0300	96	70-130	
Lab Batch #: 3090390	Sample: 625280-031 / SMP	Batch	n: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 05/28/19 23:36	SU	DDOCATE DI	COVEDV	STUDY	

Units:	mg/kg	Date Analyzed: 05/28/19 23:36	SU	RROGATE RE	ECOVERY S	STUDY	
	BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	obenzene		0.0306	0.0300	102	70-130	
4-Bromoflu	iorobenzene		0.0298	0.0300	99	70-130	

* 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: White Federal 1H Flowline (5-13-19)

Lab Batch	#: 3090390	Sample: 625280-035 / SMP	Batc	h: 1 Matrix	: Soil		
U nits:	mg/kg	Date Analyzed: 05/28/19 23:55	SU	RROGATE R	ECOVERY S	STUDY	
	mg/kg Date Analyzed: 05/28/19 23: BTEX by EPA 8021B Analytes fluorobenzene atch #: 3090390 Sample: 625280-038 mg/kg Date Analyzed: 05/29/19 00: BTEX by EPA 8021B Analytes fluorobenzene mofluorobenzene atch #: 3090434 Sample: 625280-042 mg/kg Date Analyzed: 05/29/19 03: BTEX by EPA 8021B Analytes fluorobenzene atch #: 3090434 Sample: 625280-042 mg/kg Date Analyzed: 05/29/19 03: BTEX by EPA 8021B	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluoro	obenzene		0.0310	0.0300	103	70-130	
4-Bromoflu	orobenzene		0.0303	0.0300	101	70-130	
Lab Batch	#: 3090390	Sample: 625280-038 / SMP	Batc	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/29/19 00:14	SU	RROGATE R	ECOVERY S	STUDY	
			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
1.4-Difluoro		Anarytes	0.0310	0.0300	103	70-130	
· ·			0.0308	0.0300	103	70-130	
		Sample: 625280-042 / SMP	Batc			70 150	
Units:		Date Analyzed: 05/29/19 03:22		RROGATE R		STUDY	
	BTEX	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage
		Analytes	[A]	[D]	[D]	701	
1,4-Difluoro	obenzene		0.0297	0.0300	99	70-130	
4-Bromoflu	orobenzene		0.0279	0.0300	93	70-130	
Lab Batch	#: 3090434	Sample: 625280-045 / SMP	Batc	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/29/19 03:41	SU	RROGATE R	ECOVERY S	STUDY	
			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluoro	obenzene		0.0311	0.0300	104	70-130	
4-Bromoflu	orobenzene		0.0304	0.0300	101	70-130	
Lab Batch	#: 3090434	Sample: 625280-047 / SMP	Batc	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/29/19 04:00	SU	RROGATE R	ECOVERY S	STUDY	
BTEX by EPA 8021B		A by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
				1			
1,4-Difluoro	benzene		0.0311	0.0300	104	70-130	

* 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



		0, Sample: 625280-051 / SMP	Batc		: 212C-MD-0 : Soil	01765	
U nits:	mg/kg	Date Analyzed: 05/29/19 20:28	SU	JRROGATE R	ECOVERY S	STUDY	
	TPH	oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorooct	:: mg/kg Date Analyzed: 05/29/19 20: TPH by SW8015 Mod Analytes lorooctane rphenyl Batch #: 3090431 Sample: 7678725-1-E :: mg/kg Date Analyzed: 05/26/19 11: TPH by SW8015 Mod Analytes lorooctane rphenyl Batch #: 3090399 Sample: 7678713-1-E :: mg/kg Date Analyzed: 05/28/19 16: BTEX by EPA 8021B CAnalytes Difluorobenzene Batch #: 3090390 Sample: 7678711-1-E :: mg/kg Date Analyzed: 05/28/19 16: BTEX by EPA 8021B CAnalytes Difluorobenzene Batch #: 3090390 Sample: 7678711-1-E :: mg/kg Date Analyzed: 05/28/19 16: BTEX by EPA 8021B CAnalytes Difluorobenzene Batch #: 3090390 Sample: 7678711-1-E :: mg/kg Date Analyzed: 05/28/19 16: BTEX by EPA 8021B CAnalytes Difluorobenzene Batch #: 3090434 Sample: 7678719-1-E		91.4	99.9	91	70-135	
o-Terpheny	l		44.1	50.0	88	70-135	
Lab Batch	#: 3090431	Sample: 7678725-1-BLK / I	BLK Batc	h: 1 Matrix	: Solid		
Units:	mg/kg	Date Analyzed: 05/26/19 11:26	SU	JRROGATE R	ECOVERY S	STUDY	
	TPH		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	ane		92.6	100	93	70-135	
o-Terphenyl			46.4	50.0	93	70-135	
		Sample: 7678713-1-BLK / I				10 155	
Units:		Date Analyzed: 05/28/19 16:50		JRROGATE R		STUDY	
	втех	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage
		Analytes			[D]		
1,4-Difluoro	obenzene		0.0306	0.0300	102	70-130	
4-Bromoflu	orobenzene		0.0313	0.0300	104	70-130	
Lab Batch	#: 3090390	Sample: 7678711-1-BLK / I	BLK Batc	h: 1 Matrix	: Solid		
Units:	mg/kg	Date Analyzed: 05/28/19 16:56	SU	JRROGATE R	ECOVERY S	STUDY	
	втех	-	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
1,4-Difluoro	obenzene		0.0279	0.0300	93	70-130	
4-Bromoflu	orobenzene		0.0241	0.0300	80	70-130	
Lab Batch	#: 3090434	Sample: 7678719-1-BLK / I	BLK Bate	h: 1 Matrix	: Solid		
Units:	mg/kg	Date Analyzed: 05/29/19 02:44	SU	JRROGATE R	ECOVERY S	STUDY	
	BTEX	-	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
		v					
1,4-Difluoro	obenzene		0.0276	0.0300	92	70-130	

* 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: White Federal 1H Flowline (5-13-19)

U nits:	mg/kg	Date Analyzed: 05/29/19 12:43	OT	JRROGATE R	ECOVEDV		
omes.	iiig/ kg	Date Milly200. 05/27/17 12.+5	SL	KROGATE R		STUDY	
	TPH b	oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chloroocta	ne		95.1	100	95	70-135	
o-Terphenyl			47.9	50.0	96	70-135	
Lab Batch #	: 3090431	Sample: 7678725-1-BKS / 1	BKS Bate	h: 1 Matrix	: Solid		
Units:	mg/kg	Date Analyzed: 05/26/19 11:45	SU	JRROGATE R	ECOVERY	STUDY	
		oy SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chloroocta		Analytes	125	100	125	70-135	
o-Terphenyl			62.2	50.0	124	70-135	
Lab Batch #	: 3090399	Sample: 7678713-1-BKS /]					
Units:	mg/kg	Date Analyzed: 05/28/19 15:16		JRROGATE R	ECOVERY	STUDY	
	BTEX	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluorol	oenzene		0.0266	0.0300	89	70-130	
4-Bromofluo	robenzene		0.0302	0.0300	101	70-130	
Lab Batch #	: 3090390	Sample: 7678711-1-BKS /]	BKS Bate	h: 1 Matrix	: Solid		
Units:	mg/kg	Date Analyzed: 05/28/19 15:18	SU	JRROGATE R	ECOVERY	STUDY	
	BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorol	enzene	-	0.0317	0.0300	106	70-130	
4-Bromofluo	robenzene		0.0283	0.0300	94	70-130	
Lab Batch #	: 3090434	Sample: 7678719-1-BKS /]	BKS Batc		: Solid	1	1
Units:	mg/kg	Date Analyzed: 05/29/19 01:10	SU	JRROGATE R	ECOVERY	STUDY	
	BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage
		Analytes			[D]		
1,4-Difluorol	oenzene		0.0307	0.0300	102	70-130	
	robenzene		0.0281	0.0300	94	70-130	

* 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



	ders: 625280 #: 3090586), Sample: 7678857-1-BKS /	BKS Batch): 212C-MD-0 x: Solid)1765	
Units:	mg/kg	Date Analyzed: 05/29/19 13:02			RECOVERY S	STUDY	
	TPH b	oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorooct	ane		119	100	119	70-135	
o-Terphenyl			52.2	50.0	104	70-135	
Lab Batch	#: 3090431	Sample: 7678725-1-BSD /	BSD Batch	n: 1 Matri	x: Solid		
Units:	mg/kg	Date Analyzed: 05/26/19 12:05	SU	RROGATE I	RECOVERY	STUDY	
		oy SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct			126	100	126	70-135	
o-Terphenyl			63.2	50.0	126	70-135	
	#: 3090399	Sample: 7678713-1-BSD /			x: Solid	10 100	
Units:	mg/kg	Date Analyzed: 05/28/19 15:35			RECOVERYS	STUDY	
	BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluoro	benzene		0.0271	0.0300	90	70-130	
4-Bromoflue			0.0302	0.0300	101	70-130	
Lab Batch	#: 3090390	Sample: 7678711-1-BSD /	BSD Batch	a: 1 Matri	x: Solid		
Units:	mg/kg	Date Analyzed: 05/28/19 15:38	SU	RROGATE I	RECOVERYS	STUDY	
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluoro	benzene		0.0318	0.0300	106	70-130	
4-Bromoflue	orobenzene		0.0294	0.0300	98	70-130	
Lab Batch	#: 3090434	Sample: 7678719-1-BSD /	BSD Batch	a: 1 Matri	x: Solid		
Units:	mg/kg	Date Analyzed: 05/29/19 01:29	SU	RROGATE I	RECOVERYS	STUDY	
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluoro	benzene		0.0313	0.0300	104	70-130	
	Gromofluorobenzene		1		1	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	-			FOOVEDE		
Units:	mg/kg	Date Analyzeu: 03/29/19 13.22	SU	JRROGATE R	ECOVERY	STUDY	
	TPH by SW8015 Mod Analytes Iorooctane rephenyl Batch #: 3090431 Sample: 625280-001 : s: mg/kg Date Analyzed: 05/26/19 12:- TPH by SW8015 Mod Analytes Iorooctane rephenyl Batch #: 3090399 Sample: 625614-001 : s: mg/kg Date Analyzed: 05/28/19 15:: BTEX by EPA 8021B Analytes Difluorobenzene Batch #: 3090390 Sample: 625613-001 : s: mg/kg Date Analyzed: 05/28/19 15:: BTEX by EPA 8021B Difluorobenzene Batch #: 3090434 Sample: 625615-001 : s: mg/kg Date Analyzed: 05/29/19 01:: BTEX by EPA 8021B Sample: 625615-001 : s: mg/kg Date Analyzed: 05/29/19 01::	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage
		Analytes	[A]		[D]	/or	
1-Chlorooctane	Batch #: 3090586 Sample: 7678857-1- s: mg/kg Date Analyzed: 05/29/19 13 TPH by SW8015 Mod Analytes alorooctane		121	100	121	70-135	
o-Terphenyl			57.1	50.0	114	70-135	
Lab Batch #:	3090431	Sample: 625280-001 S / MS	Bato	ch: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/26/19 12:44	SU	URROGATE R	ECOVERY S	STUDY	
	TPH I		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1-Chlorooctane	2	Analytes	113	99.8	113	70-135	
o-Terphenyl	-		45.6	49.9	91	70-135	
1 2	3090399	Sample: 625614-001 S / MS	Bate			70-135	
Units:		1		JRROGATE R		TUDV	
	6 6		50				
	BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flag
		Analytes	[]	[2]	[D]	,011	
1,4-Difluorobe	nzene		0.0276	0.0300	92	70-130	
4-Bromofluoro	benzene		0.0311	0.0300	104	70-130	
Lab Batch #:	3090390	Sample: 625613-001 S / MS	Bato	ch: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/28/19 15:58	SU	URROGATE R	ECOVERY S	STUDY	
	BTEX		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobe	nzene		0.0318	0.0300	106	70-130	
4-Bromofluoro	benzene		0.0299	0.0300	100	70-130	
Lab Batch #:	3090434	Sample: 625615-001 S / MS	Bato	h: 1 Matrix	: Soil	<u> </u>	
Units:	mg/kg	Date Analyzed: 05/29/19 01:48	SU	JRROGATE R	ECOVERY S	STUDY	
	втех		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
		Analytes			[17]		
1,4-Difluorobe			0.0311	0.0300	104 99	70-130 70-130	

* 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



	rders: 62528 #: 3090586	Sample: 625759-001 S / MS	S Bate		: 212C-MD-0 :: Soil	11705	
Units:	mg/kg	Date Analyzed: 05/29/19 14:01	SU	JRROGATE R	ECOVERY S	STUDY	
	TPH	oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorooct	TPH by SW8015 Mod Analytes Ilorooctane rephenyl Batch #: 3090431 Sample: 625280-001 s: mg/kg Date Analyzed: 05/26/19 13 TPH by SW8015 Mod Analytes Ilorooctane rephenyl Batch #: 3090399 Sample: 625614-001 s: mg/kg Date Analyzed: 05/28/19 16 BTEX by EPA 8021B BTEX by EPA 8021B Difluorobenzene Batch #: 3090390 Sample: 625613-001 s: mg/kg Date Analyzed: 05/28/19 16 BTEX by EPA 8021B Difluorobenzene Batch #: 3090390 Sample: 625613-001 s: mg/kg Date Analyzed: 05/28/19 16 BTEX by EPA 8021B Difluorobenzene Batch #: 3090390 Sample: 625613-001 s: mg/kg Date Analyzed: 05/28/19 16 BTEX by EPA 8021B BTEX by EPA 8021B BTEX by EPA 8021B Difluorobenzene Difluorobenzene		117	99.8	117	70-135	
o-Terpheny	1		53.1	49.9	106	70-135	
Lab Batch	#: 3090431	Sample: 625280-001 SD / N	ASD Bate	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/26/19 13:04	SU	JRROGATE R	ECOVERY	STUDY	
	TPH		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooct	tane	Anarytes	118	100	118	70-135	
o-Terpheny			52.7	50.0	118	70-135	
		Sample: 625614-001 SD / N				10-135	
Units:		•		JRROGATE R		TUDV	
emus.	ing ng	Dute Hindy 200, 20, 17 10.15	51	JRRUGATE R		STUDY	
	BTEX		Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage
		Analytes			[D]		
1,4-Difluor	obenzene		0.0276	0.0300	92	70-130	
			0.0332	0.0300	111	70-130	
		Sample: 625613-001 SD / N	ASD Bate	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/28/19 16:17	SU	JRROGATE R	ECOVERY S	STUDY	
	ВТЕХ		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluor	obenzene		0.0327	0.0300	109	70-130	
4-Bromoflu	orobenzene		0.0271	0.0300	90	70-130	
Lab Batch	#: 3090434	Sample: 625615-001 SD / N	ASD Bate	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/29/19 02:07	SU	JRROGATE R	ECOVERY	STUDY	
	ВТЕХ	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
	obenzene	-	0.0310	0.0300	103	70-130	
1,4-Difluor							

* 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



	orders: 62528 h #: 3090586	0, Sample: 625759-001 SD / 1	Project ID: 212C-MD-01765 MSD Batch: 1 Matrix: Soil							
Units:	mg/kg	Date Analyzed: 05/29/19 14:20	r	RROGATE RE		STUDY				
TPH by SW8015 Mod Analytes		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorood	ctane	•	119	99.9	119	70-135				
o-Terphenyl			53.1	50.0	106	70-135				

* 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



BS / BSD Recoveries



.

Project Name: White Federal 1H Flowline (5-13-19)

Work Order #: 625280							Proj	ect ID: 2	212C-MD-()1765	
Analyst: SCM	D	ate Prepar	red: 05/28/201	.9			Date A	nalyzed: (05/28/2019		
Lab Batch ID: 3090390 Sample: 7678711-1	-BKS	Batcl	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K/BLANK	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUI	ЭY	
BTEX by EPA 8021B 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
Benzene	< 0.000383	0.0996	0.107	107	0.101	0.120	119	11	70-130	35	
Toluene	< 0.000454	0.0996	0.0996	100	0.101	0.111	110	11	70-130	35	
Ethylbenzene	< 0.000563	0.0996	0.106	106	0.101	0.118	117	11	70-130	35	
m,p-Xylenes	< 0.00101	0.199	0.220	111	0.202	0.246	122	11	70-130	35	
o-Xylene	< 0.000343	0.0996	0.108	108	0.101	0.121	120	11	70-130	35	
Analyst: SCM	D	ate Prepar	red: 05/28/201	.9			Date A	nalyzed: (05/28/2019		
Lab Batch ID: 3090399 Sample: 7678713-1	-BKS	Batcl	h #: 1					Matrix: S	Solid		
Units: mg/kg		BLAN	K /BLANK S	SPIKE / I	BLANK S	SPIKE DUP	LICATE	RECOVI	ERY STUI)Y	
BTEX by EPA 8021B 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
Benzene	<0.00200	0.0998	0.101	101	0.100	0.103	103	2	70-130	35	<u> </u>
Toluene	<0.00200	0.0998	0.102	102	0.100	0.101	101	1	70-130	35	
Ethylbenzene	< 0.00200	0.0998	0.115	115	0.100	0.114	114	1	70-130	35	
m,p-Xylenes	< 0.00399	0.200	0.241	121	0.201	0.236	117	2	70-130	35	
o-Xylene	<0.00200	0.0998	0.114	114	0.100	0.113	113	1	70-130	35	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries



.

Project Name: White Federal 1H Flowline (5-13-19)

Work Order #: 625280							Proj	ject ID:	212C-MD-0	01765	
Analyst: SCM	D	ate Prepar	ed: 05/28/20	19			Date A	nalyzed:	05/29/2019		
Lab Batch ID: 3090434 Sample: 7678719-1	-BKS	Batch	n #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
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
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Benzene	<0.000383	0.0996	0.103	103	0.0994	0.0997	100	3	70-130	35	
Toluene	< 0.000454	0.0996	0.0954	96	0.0994	0.0915	92	4	70-130	35	
Ethylbenzene	< 0.000563	0.0996	0.101	101	0.0994	0.0956	96	5	70-130	35	
m,p-Xylenes	< 0.00101	0.199	0.207	104	0.199	0.198	99	4	70-130	35	
o-Xylene	<0.000343	0.0996	0.102	102	0.0994	0.0998	100	2	70-130	35	
Analyst: CHE	D	ate Prepar	ed: 05/23/20	19			Date A	nalyzed:	05/23/2019		
Lab Batch ID: 3090079 Sample: 7678489-1	-BKS	Batch	n #: 1					Matrix:	Solid		
Units: mg/kg		BLAN	K /BLANK	SPIKE /]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
Chloride by EPA 300 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	<0.858	250	243	97	250	243	97	0	90-110	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes





Project Name: White Federal 1H Flowline (5-13-19)

Work Orde	r #: 625280							Pro	ject ID:	212C-MD-	01765	
Analyst:	CHE	D	ate Prepar	red: 05/23/20	19			Date A	nalyzed: (05/24/2019		
Lab Batch ID	Sample: 3090081	7678490-1-BKS	Batcl	h #: 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK	SPIKE /]	BLANK	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
Anal	Chloride by EPA 300	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	246	98	250	246	98	0	90-110	20	
Analyst:	CHE	D	ate Prepar	ed: 05/23/20	19	-	1	Date A	nalyzed: ()5/23/2019	+	ļ
Lab Batch ID	Sample: 3090083	7678491-1-BKS	Batcl	h #: 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK	SPIKE / 2	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
Anal	Chloride by EPA 300	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	258	103	250	259	104	0	90-110	20	
Analyst:	ARM			red: 05/26/20		200	207)5/26/2019		
Lab Batch ID		7678725-1-BKS	-	h #: 1	17			Dute	Matrix: S			
Units:	mg/kg		BLAN	K /BLANK	SPIKE / 2	BLANK	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
	TPH by SW8015 Mod	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
Anal	vtes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Gasoline	ytes Range Hydrocarbons (GRO)	<8.00	[B]	[C] 1120	[D]	[E] 1000	Result [F] 1120	[G] 112	0	70-135	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes





Project Name: White Federal 1H Flowline (5-13-19)

Work Order	#: 625280							Pro	ject ID: 💈	212C-MD-0)1765	
Analyst:	ARM	D	ate Prepar	red: 05/29/201	.9			Date A	nalyzed: ()5/29/2019		
Lab Batch ID	: 3090586 Sample: 7678857-1	-BKS	Bate	h #: 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK S	SPIKE / I	BLANK S	SPIKE DUPI	LICATE	RECOVI	ERY STUD	θY	
	TPH by SW8015 Mod	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	vtes		[B]	[C]	[D]	[E]	Result [F]	[G]				
Gasoline I	Range Hydrocarbons (GRO)	<8.00	1000	1070	107	1000	1060	106	1	70-135	20	
Diesel Rat	nge Organics (DRO)	<8.13	1000	1010	101	1000	1020	102	1	70-135	20	

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes





Project Name: White Federal 1H Flowline (5-13-19)

Work Order # : 625280						Project II	D: 212C-N	MD-0176	5		
Lab Batch ID: 3090390	QC- Sample ID:	625613	-001 S	Ba	tch #:	1 Matri	x: Soil				
Date Analyzed: 05/28/2019	Date Prepared:	05/28/2	019	Ar	alyst: S	SCM					
Reporting Units: mg/kg		Μ	ATRIX 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	<0.000384	0.0998	0.110	110	0.100	0.0909	91	19	70-130	35	
Toluene	< 0.000455	0.0998	0.102	102	0.100	0.0826	83	21	70-130	35	
Ethylbenzene	< 0.000564	0.0998	0.109	109	0.100	0.0849	85	25	70-130	35	
m,p-Xylenes	<0.00101	0.200	0.227	114	0.200	0.174	87	26	70-130	35	
o-Xylene	0.000451	0.0998	0.110	110	0.100	0.0837	83	27	70-130	35	
Lab Batch ID: 3090399	QC- Sample ID:	625614	-001 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed: 05/28/2019	Date Prepared:	05/28/2	019	Ar	alyst: S	SCM					
Reporting Units: mg/kg		Μ	ATRIX 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	<0.00200	0.100	0.0761	76	0.101	0.0652	65	15	70-130	35	X
Toluene	< 0.00200	0.100	0.0766	77	0.101	0.0741	73	3	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0856	86	0.101	0.0751	74	13	70-130	35	
m,p-Xylenes	<0.00401	0.200	0.180	90	0.201	0.136	68	28	70-130	35	X
o-Xylene	< 0.00200	0.100	0.0855	86	0.101	0.0629	62	30	70-130	35	X

Matrix Spike Percent Recovery $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference RPD = $200^{\circ}[(C-F)/(C+F)]$ 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.

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Project Name: White Federal 1H Flowline (5-13-19)

Work Order # :	625280						Project II): 212C-N	MD-0176	5		
Lab Batch ID:	3090434	QC- Sample ID:	625615	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	05/29/2019	Date Prepared:	05/28/2	019	Ar	alyst: S	SCM					
Reporting Units:	mg/kg		Μ	IATRIX 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]		[D]	[E]		[G]				
Benzene		<0.000386	0.100	0.101	101	0.0992	0.106	107	5	70-130	35	
Toluene		<0.000457	0.100	0.0928	93	0.0992	0.0970	98	4	70-130	35	
Ethylbenzene		<0.000566	0.100	0.0967	97	0.0992	0.102	103	5	70-130	35	
m,p-Xylenes		<0.00102	0.200	0.200	100	0.198	0.208	105	4	70-130	35	
o-Xylene		0.000360	0.100	0.0987	98	0.0992	0.100	100	1	70-130	35	
Lab Batch ID:	3090079	QC- Sample ID:	625280	-011 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	05/24/2019	Date Prepared:	05/23/2	019	Ar	alyst: (CHE					
Reporting Units:	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Reporting Units:	mg/kg Chloride by EPA 300	Parent Sample Regult	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Reporting Units:				Spiked Sample	Spiked		Duplicate	Spiked		Control		Flag
Reporting Units:	Chloride by EPA 300	Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample	Spiked Dup. %R	RPD	Control Limits	Limits	Flag
	Chloride by EPA 300	Sample Result [A]	Spike Added [B] 248	Spiked Sample Result [C] 661	Spiked Sample %R [D] 54	Spike Added [E]	Duplicate Spiked Sample Result [F] 734	Spiked Dup. %R [G]	RPD %	Control Limits %R	Limits %RPD	
Chloride	Chloride by EPA 300 Analytes	Sample Result [A] 526	Spike Added [B] 248 625334	Spiked Sample Result [C] 661 -001 S	Spiked Sample %R [D] 54 Ba	Spike Added [E] 248	Duplicate Spiked Sample Result [F] 734 1 Matrix	Spiked Dup. %R [G] 84	RPD %	Control Limits %R	Limits %RPD	
Chloride Lab Batch ID:	Chloride by EPA 300 Analytes	Sample Result [A] 526 QC- Sample ID:	Spike Added [B] 248 625334 05/23/2	Spiked Sample Result [C] 661 -001 S 019	Spiked Sample %R [D] 54 Ba Ar	Spike Added [E] 248 .tch #: nalyst: (Duplicate Spiked Sample Result [F] 734 1 Matrix	Spiked Dup. %R [G] 84 x: Sludge	RPD %	Control Limits %R 90-110	Limits %RPD	
Chloride Lab Batch ID: Date Analyzed:	Chloride by EPA 300 Analytes 3090079 05/23/2019	Sample Result [A] 526 QC- Sample ID: Date Prepared: Parent Sample	Spike Added [B] 248 625334 05/23/2 M Spike	Spiked Sample Result [C] 661 -001 S 019 [ATRIX SPIK Spiked Sample Result	Spiked Sample %R [D] 54 Ba Ar E / MAT Spiked Sample	Spike Added [E] 248 tch #: aalyst: (RIX SPI Spike	Duplicate Spiked Sample Result [F] 734 1 Matrix CHE KE DUPLICA Duplicate Spiked Sample	Spiked Dup. %R [G] 84 x: Sludge TE REC Spiked Dup.	RPD % 10 OVERY 7 RPD	Control Limits %R 90-110 STUDY Control Limits	Limits %RPD 20 Control Limits	
Chloride Lab Batch ID: Date Analyzed:	Chloride by EPA 300 Analytes 3090079 05/23/2019 mg/kg	Sample Result [A] 526 QC- Sample ID: Date Prepared: Parent	Spike Added [B] 248 625334 05/23/2 M	Spiked Sample Result [C] 661 -001 S 019 [ATRIX SPIK Spiked Sample	Spiked Sample %R [D] 54 Ba Ar E / MAT Spiked	Spike Added [E] 248 Atch #: nalyst: (RIX SPI	Duplicate Spiked Sample Result [F] 734 1 Matrix CHE KE DUPLICA Duplicate	Spiked Dup. %R [G] 84 x: Sludge TE REC Spiked	RPD % 10	Control Limits %R 90-110 STUDY Control	Limits %RPD 20 Control	X

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.

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Project Name: White Federal 1H Flowline (5-13-19)

Work Order # :	625280						Project II): 212C-1	MD-0176	5		
Lab Batch ID:	3090081	QC- Sample ID:	625281	-012 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	05/24/2019	Date Prepared:	05/23/2	019	An	alyst: (CHE					
Reporting Units:	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	Parent Sample Result	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride		71.1	250	317	98	250	320	100	1	90-110	20	
Lab Batch ID:	3090081	QC- Sample ID:	625281	-013 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	05/24/2019	Date Prepared:	05/23/2	019	An	alyst: (CHE					
Reporting Units:	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	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]	Kesun [F]	[G]	70	701	70 KI D	
Chloride		48.2	248	274	91	248	292	98	6	90-110	20	
Lab Batch ID:	3090083	QC- Sample ID:	625280	-037 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	05/23/2019	Date Prepared:	05/23/2	019	An	alyst: (CHE					
Reporting Units:	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	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]	[U]	50K [D]	[E]	Acsunt [F]	56K [G]	70	701	70 KF D	
Chloride		564	251	810	98	251	807	97	0	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.





Project Name: White Federal 1H Flowline (5-13-19)

Work Order # :	625280						Project II): 212C-N	MD-0176	5		
Lab Batch ID:	3090083	C- Sample ID:	625280	-041 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	05/23/2019	Date Prepared:	05/23/2	019	An	alyst: (CHE					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	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]	Kesun [F]	[G]	70	701	70KI D	
Chloride		1120	250	1320	80	250	1320	80	0	90-110	20	X
Lab Batch ID:	3090431	C- Sample ID:	625280	-001 S	Ba	tch #:	1 Matrix	k: Soil	-			
Date Analyzed:	05/26/2019	Date Prepared:	05/26/2	019	An	alyst: A	ARM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	TPH by SW8015 Mod	Parent Sample Result	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample		RPD	Control Limits	Control Limits	Flag
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Gasoline Range	e Hydrocarbons (GRO)	<7.99	998	1060	106	1000	1080	108	2	70-135	20	
Diesel Range O	Organics (DRO)	8.92	998	1020	101	1000	1030	102	1	70-135	20	
Lab Batch ID:	3090586	C- Sample ID:	625759	-001 S	Ba	tch #:	1 Matrix	k: Soil				
Date Analyzed:	05/29/2019	Date Prepared:	05/29/2	019	An	alyst: A	ARM					
Reporting Units:	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	TPH 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]	Acoutt [F]	[G]	/0	/01		
Gasoline Range	e Hydrocarbons (GRO)	<7.99	998	1070	107	999	1080	108	1	70-135	20	
Diesel Range (Organics (DRO)	<8.11	998	1020	102	999	1060	106	4	70-135	20	

Matrix Spike Percent Recovery $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference RPD = $200^{\circ}[(C-F)/(C+F)]$ 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.

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Received by OC.	linquished by:		linquished by:		slinnuished hy-		-	-							LAB USE ONLY	LAB #	· · · · · · · · · · · · · · · · · · ·	Comments: Pl 10	Receiving Laboratory:	invoice to:	Project Location: state)	Project Name:			nalysis Requ
	Date: Time:		Date: Time:			AH-3 (1'-1.5')	AH-3 (0-1')	AH-2 (2'-2.5')	AH-2 (1'-1.5')	AH-2 (0-1')	AH-1 (2.5'-3')	AH-1 (2'-2.5')	AH-1 (1'-1.5)	AH-1 (0-1')		SAMPLE IDENTIFICATION		Run deeper samples if TPH (GRO + DRO + MRO) exceeds 1,000 mg/kg. run deeper samples if 10 mg/kg or Total BTEX exceeds 50 mg/kg.	y: Xenco	lke Tavarez	(county, Eddy County, New Mexico	White Federal 1H Flowline (5-13-19)	COG	Tetra Tech, Inc.	<i>tge 79 of 314</i> Analysis Request of Chain of Custody Record
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Ϋ́c	Date:	Dale.		Date:	×	×	×	×	×	×	×	×	×		TIME WATEI SOIL HCL	R	MATRIX	. run deeper sample	Devin Doming		212C-MD-017		Mike Carmona	900 West Wall Street, Ste 100 Midland,Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946	
	Time:	illie:	ING IUGZ	Time:	×	×	×		×	×	×	×	×	×	HNO ₃ ICE None # CONT	AINE	PRESERVATIVE	benzene	ninguez		01765		ä	itreet, Ste 100 as 79701 82-4559 82-3946	
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(Circle)	<u>,</u>	Sample	.	LAB	×		×			×					BTEX 80 TPH TX			X 8260B	I	1					9-
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Received by OCI]: <i>5/14/2</i>	<u>021 1</u>	9:15:5	34	y _	т	1		<u> </u>		<u> </u>	<u> </u>	<u> </u>						्र	st P			Pa	e 80 of 314
Received by OCI	elinquished by:	eiiriquisnea by:	Kar and a second s	elinguished hv.										LAB USE	LAB #		Comments: P	aborat	Invoice to:	Project Location: state)	Project Name:	Client Name:		nalysis Requ
	Date: Time:	Date: lime:	p1-56-5	AH-6 (;	AH-6 (1'-1.5')	AH-6 (0-1')	AH-5 (3'-3.5')	AH-5 (2'-2.5')	AH-5 (1'-1.5')	AH-5 (0-1')	AH-4 (3'-3.5')	AH-4 (2'-2.5')	AH-4 (1'-1.5')		SAMPLE IDENTIFICATION		Run deeper samples if TPH (GRO + DRO + MRO) exc 10 mg/kg or Total BTEX exceeds 50 mg/kg.	vy: Xenco	Ike Tavarez	(county, Eddy County, New Mexico	White Federal 1H Flowline (5-13-19)	COG	Tetra Tech, Inc.	<i>ge 80 of 314</i> Analysis Request of Chain of Custody Record
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ОРҮ			SUZ	×	×	×	×	×	×	×	×	×	×	TIME WATEI SOIL	7	G MATRIX	MRO) exceeds 1,000 mg/kg. run deeper samples if benzene			212C-		Mike Car	900 West Mida Tel Fax	
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Υu	Date:	• Date:	9			×				×	×	×		WATER SOIL HCL HNO₃			MRO) exceeds 1,000 mg/kg. run deeper samples if benzene	Devin Dominguez		212C-MD-0176		Mike Carmona	900 West Wall Street, Ste 1 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946	
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	Date:	Date:	60	Date: T											HCL HNO3		Ţ	amples	Devin Dominguez		212C-MD-0176		Carmona	900 West Wall Street, Ste 1 Midland,Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946	
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Received by OCD: 5/14/2021 10:15:53 AM



# **XENCO** Laboratories



### Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 05/23/2019 10:48:00 AM Temperature Measuring device used : R8 Work Order #: 625280 Comments Sample Receipt Checklist 3.1 #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)? N/A #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:

Date: 05/23/2019

Checklist reviewed by: Jession Vramer

Jessica Kramer

Date: 05/28/2019

Released to Imaging: 7/22/2021 11:35:28 AM

# Analytical Report 625281

for Tetra Tech- Midland

**Project Manager: Mike Carmona** 

White Federal 1H Flowline (5-13-19)

212C-MD-01765

### 29-MAY-19

Collected By: Client





### 1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429), North Carolina (483)



29-MAY-19



Project Manager: **Mike Carmona Tetra Tech- Midland** 901 West Wall ST Midland, TX 79701

Reference: XENCO Report No(s): **625281 White Federal 1H Flowline (5-13-19)** Project Address: Eddy County, New Mexico

#### Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 625281. 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. 625281 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,

Jession Vermer

Jessica Kramer Project Assistant

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

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#### Sample Id

Horizontal NW-1 (0-1')
Horizontal NW-1 (1'-1.5')
Horizontal NW-2 (0-1')
Horizontal NW-2 (1'-1.5')
Horizontal NW-3 (0-1')
Horizontal NW-4 (0-1')
Horizontal NW-5 (0-1')
Horizontal NW-6 (0-1')
Horizontal NW-6 (1'-1.5')
Horizontal SE-1 (0-1')
Horizontal SE-1 (1-1.5')
Horizontal SE-2 (0-1')
Horizontal SE-3 (0-1')
Horizontal SE-4 (0-1')
Horizontal SE-4 (1-1.5')

# Sample Cross Reference 625281



White Federal 1H Flowline (5-13-19)

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	05-21-19 00:00		625281-001
S	05-21-19 00:00		625281-002
S	05-21-19 00:00		625281-003
S	05-21-19 00:00		625281-004
S	05-21-19 00:00		625281-005
S	05-21-19 00:00		625281-006
S	05-21-19 00:00		625281-007
S	05-21-19 00:00		625281-008
S	05-21-19 00:00		625281-009
S	05-21-19 00:00		625281-010
S	05-21-19 00:00		625281-011
S	05-21-19 00:00		625281-012
S	05-21-19 00:00		625281-013
S	05-21-19 00:00		625281-014
S	05-21-19 00:00		625281-015

Rage 87 of 314







Client Name: Tetra Tech- Midland Project Name: White Federal 1H Flowline (5-13-19)

Project ID: 212C-MD-01765 Work Order Number(s): 625281 
 Report Date:
 29-MAY-19

 Date Received:
 05/23/2019

#### Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

#### Analytical non conformances and comments:

Batch: LBA-3090088 Chloride by EPA 300

Lab Sample ID 625335-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 625281-003, -004, -005, -006, -007, -008, -009, -010, -011, -014. The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3090331 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered below QC limits. Matrix interferences is suspected. Samples affected are: 625281-008,625281-007.

Batch: LBA-3090399 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030. Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected. Samples affected are: 625281-012,625281-008.

Batch: LBA-3090434 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 625281

Tetra Tech- Midland, Midland, TX

Project Name: White Federal 1H Flowline (5-13-19)



**Project Id:** 212C-MD-01765 **Contact:** Mike Carmona **Project Location:** Eddy County, New Mexico

Date Received in Lab: Thu May-23-19 10:48 am Report Date: 29-MAY-19 Project Manager: Jessica Kramer

	Lab Id:	625281-0	001	625281-0	02	625281-0	003	625281-0	04	625281-	005	625281-	006
An alusia Dogu astad	Field Id:	Horizontal NW	V-1 (0-1')	Horizontal NW-2	1 (1'-1.5')	Horizontal NW	'-2 (0-1')	Horizontal NW-	2 (1'-1.5')	Horizontal NV	V-3 (0-1')	Horizontal NV	V-4 (0-1')
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	,	SOIL	
	Sampled:	May-21-19	00:00	May-21-19 (	00:00	May-21-19	00:00	May-21-19	00:00	May-21-19	00:00	May-21-19	00:00
BTEX by EPA 8021B	Extracted:	May-28-19	15:15			May-28-19	15:15			May-28-19	15:15	May-28-19	15:15
	Analyzed:	May-28-19	21:51			May-28-19	22:10			May-28-19	22:29	May-28-19	22:48
	Units/RL:	mg/kg	RL			mg/kg	RL			mg/kg	RL	mg/kg	RL
Benzene		< 0.00199	0.00199			< 0.00198	0.00198			< 0.00201	0.00201	< 0.00199	0.00199
Toluene		< 0.00199	0.00199			< 0.00198	0.00198			< 0.00201	0.00201	< 0.00199	0.00199
Ethylbenzene		< 0.00199	0.00199			< 0.00198	0.00198			< 0.00201	0.00201	< 0.00199	0.00199
m,p-Xylenes		< 0.00398	0.00398			< 0.00397	0.00397			< 0.00402	0.00402	< 0.00398	0.00398
o-Xylene		< 0.00199	0.00199			< 0.00198	0.00198			< 0.00201	0.00201	< 0.00199	0.00199
Total Xylenes		< 0.00199	0.00199			< 0.00198	0.00198			< 0.00201	0.00201	< 0.00199	0.00199
Total BTEX		< 0.00199	0.00199			< 0.00198	0.00198			< 0.00201	0.00201	< 0.00199	0.00199
Chloride by EPA 300	Extracted:	May-23-19	15:30	May-23-19	15:30	May-23-19	16:40	May-23-19	16:40	May-23-19	16:40	May-23-19	16:40
	Analyzed:	May-23-19	21:23	May-23-19 2	21:28	May-24-19	06:38	May-24-19	06:16	May-24-19	06:45	May-24-19	06:52
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		6750	49.5	35.8	4.99	1460	5.03	276	4.96	217	4.99	279	4.96
TPH by SW8015 Mod	Extracted:	May-25-19	10:00			May-25-19	10:00			May-25-19	10:00	May-25-19	10:00
	Analyzed:	May-25-19	18:40			May-25-19	19:05			May-25-19	19:29	May-25-19	20:18
	Units/RL:	mg/kg	RL			mg/kg	RL			mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0			<14.9	14.9			<15.0	15.0	<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0			<14.9	14.9			<15.0	15.0	<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0			<14.9	14.9			<15.0	15.0	<15.0	15.0
Total TPH		<15.0	15.0			<14.9	14.9			<15.0	15.0	<15.0	15.0

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Jessica Kramer Project Assistant

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Final 1.000



Project Id:212C-MD-01765Contact:Mike CarmonaProject Location:Eddy County, New Mexico

## Certificate of Analysis Summary 625281

Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5-13-19)** 



Date Received in Lab:Thu May-23-19 10:48 amReport Date:29-MAY-19Project Manager:Jessica Kramer

	Lab Id:	625281-0	007	625281-0	08	625281-0	09	625281-0	010	625281-0	11	625281-0	012
	Field Id:	Horizontal NW	/-5 (0-1')	Horizontal NW	-6 (0-1')	Horizontal NW-6	6 (1'-1.5')	Horizontal SE-	-1 (0-1')	Horizontal SE-1	(1-1.5')	Horizontal SE	-2 (0-1')
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	,
	Sampled:	May-21-19	00:00	May-21-19	00:00	May-21-19 (	00:00	May-21-19	00:00	May-21-19	00:00	May-21-19	00:00
BTEX by EPA 8021B	Extracted:	May-28-19	15:15	May-28-19	15:15			May-28-19	15:15			May-28-19	15:15
	Analyzed:	May-28-19	23:07	May-28-192	23:26			May-28-192	23:45			May-29-19	00:04
	Units/RL:	mg/kg	RL	mg/kg	RL			mg/kg	RL			mg/kg	RL
Benzene		< 0.00202	0.00202	< 0.00200	0.00200			< 0.00200	0.00200			< 0.00201	0.00201
Toluene		< 0.00202	0.00202	< 0.00200	0.00200			< 0.00200	0.00200			< 0.00201	0.00201
Ethylbenzene		< 0.00202	0.00202	< 0.00200	0.00200			< 0.00200	0.00200			< 0.00201	0.00201
m,p-Xylenes		< 0.00403	0.00403	< 0.00399	0.00399			< 0.00400	0.00400			< 0.00402	0.00402
o-Xylene		< 0.00202	0.00202	< 0.00200	0.00200			< 0.00200	0.00200			< 0.00201	0.00201
Total Xylenes		< 0.00202	0.00202	< 0.00200	0.00200			< 0.00200	0.00200			< 0.00201	0.00201
Total BTEX		< 0.00202	0.00202	< 0.00200	0.00200			< 0.00200	0.00200			< 0.00201	0.00201
Chloride by EPA 300	Extracted:	May-23-19	16:40	May-23-19	16:40	May-23-19	16:40	May-23-19	16:40	May-23-19	16:40	May-23-19	15:00
	Analyzed:	May-24-19	06:59	May-24-19 (	07:21	May-24-19 (	07:29	May-24-19	07:36	May-24-19 (	07:43	May-24-19	02:17
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		260	5.05	854	4.98	403	5.00	12800	100	328	5.00	71.1	4.99
TPH by SW8015 Mod	Extracted:	May-25-19	10:00	May-25-19	10:00			May-25-19	10:00			May-25-19	10:00
	Analyzed:	May-25-19	20:43	May-25-192	21:07			May-25-19	21:32			May-25-19	21:56
	Units/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			<14.9	14.9			<15.0	15.0
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0			<14.9	14.9			<15.0	15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0			<14.9	14.9			<15.0	15.0
Total TPH		<15.0	15.0	<15.0	15.0			<14.9	14.9			<15.0	15.0

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Jessica Kramer Project Assistant

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Project Id:212C-MD-01765Contact:Mike CarmonaProject Location:Eddy County, New Mexico

Certificate of Analysis Summary 625281

Tetra Tech- Midland, Midland, TX





Date Received in Lab:Thu May-23-19 10:48 amReport Date:29-MAY-19Project Manager:Jessica Kramer

	Lab Id:	625281-0	)13	625281-0	14	625281-0	15		
Ameluaia Doguostad	Field Id:	Horizontal SE	-3 (0-1')	Horizontal SE-	4 (0-1')	Horizontal SE-4	4 (1-1.5')		
Analysis Requested	Depth:								
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	May-21-19	00:00	May-21-19 (	00:00	May-21-19 (	00:00		
BTEX by EPA 8021B	Extracted:	May-28-19	16:00	May-28-19	16:00				
	Analyzed:	May-29-19	04:19	May-29-19 (	04:38				
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		< 0.00198	0.00198	< 0.00200	0.00200				
Toluene		< 0.00198	0.00198	< 0.00200	0.00200				
Ethylbenzene		< 0.00198	0.00198	< 0.00200	0.00200				
m,p-Xylenes		< 0.00397	0.00397	< 0.00401	0.00401				
o-Xylene		< 0.00198	0.00198	< 0.00200	0.00200				
Total Xylenes		< 0.00198	0.00198	< 0.00200	0.00200				
Total BTEX		< 0.00198	0.00198	< 0.00200	0.00200				
Chloride by EPA 300	Extracted:	May-23-19	15:00	May-23-19	16:40	May-28-19	13:10		
	Analyzed:	May-24-19	03:58	May-24-19 (	07:50	May-28-19	18:17		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		48.2	4.95	2670	25.0	481	4.96		
TPH by SW8015 Mod	Extracted:	May-25-19	10:00	May-25-19	10:00				
	Analyzed:	May-25-19	22:21	May-25-19 2	22:45				
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0				
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0				
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0				
Total TPH		<15.0	15.0	<15.0	15.0				

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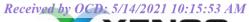
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# LABORATORIES

# **Flagging Criteria**



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- 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 LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

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



Work Ore Lab Batch #	<b>ders :</b> 62528 <b>#</b> : 3090331	1, Sample: 625281-001 / SMP	Batcl	-	212C-MD-0 Soil	)1765			
Units:	mg/kg	<b>Date Analyzed:</b> 05/25/19 18:40	SU	RROGATE R	ECOVERY S	STUDY			
	TPH b	by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags		
		Analytes			[D]				
1-Chloroocta	ne		102	99.7	102	70-135			
o-Terphenyl			47.0	49.9	94	70-135			
Lab Batch #	<b>:</b> 3090331	Sample: 625281-003 / SMP	Batcl	h: 1 Matrix	Soil				
Units:	mg/kg	Date Analyzed: 05/25/19 19:05	SU	RROGATE R	ECOVERY S	70-135         70-135         70-135         STUDY         Limits %R         70-135         70-135         STUDY         Control Limits %R         Flag         70-135         70-135         70-135         70-135         70-135         70-135			
		by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Limits	Flags		
1-Chloroocta			102	99.6	102	70-135			
o-Terphenyl			37.0	49.8	74				
Lab Batch #	<b>:</b> 3090331	Sample: 625281-005 / SMP	Batcl						
Units:	mg/kg	Date Analyzed: 05/25/19 19:29		RROGATE R		STUDY			
	трн і	by SW8015 Mod	Amount	True		Control			
		Analytes	Found [A]	Amount [B]	Recovery %R [D]		Flags		
1-Chloroocta			102	99.9	102	70-135			
o-Terphenyl			39.2	50.0	78	70-135			
Lab Batch #	<b>:</b> 3090331	Sample: 625281-006 / SMP	Batcl	h: 1 Matrix	: Soil				
Units:	mg/kg	<b>Date Analyzed:</b> 05/25/19 20:18	SU	RROGATE R	ECOVERY	STUDY			
		by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chloroocta			94.9	99.7	95	70-135			
o-Terphenyl			42.8	49.9	86	70-135			
Lab Batch #	<b>#:</b> 3090331	Sample: 625281-007 / SMP	Batcl			/0-133			
Units:	mg/kg	Date Analyzed: 05/25/19 20:43		RROGATE R		STUDY			
		by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags		
1-Chloroocta		-	89.5	99.7	90	70-135			
o-Terphenyl			34.2	49.9	69	70-135	**		

* Surrogate outside of Laboratory QC limits

Released to Imaging: 7/22/2021 11:35:28 AM

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B



Lab Batch #	lers: 62528 : 3090331	Sample: 625281-008 / SMP	Batch		: 212C-MD-0 : Soil						
U <b>nits:</b>	mg/kg	Date Analyzed: 05/25/19 21:07	SU	RROGATE R	ECOVERY S	STUDY					
	TPH I	oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags				
		Analytes			[D]						
1-Chlorooctar	ne		87.9	99.8	88	70-135					
o-Terphenyl			34.4 49.9 69 70-135 **								
Lab Batch #	: 3090331	Sample: 625281-010 / SMP	Batch	n: 1 Matrix	: Soil						
U <b>nits:</b>	mg/kg	Date Analyzed: 05/25/19 21:32	SU	RROGATE R	ECOVERY S	STUDY					
	TPH b	oy SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chlorooctar	ne	Analytes	98.0	99.6	98	70-135					
o-Terphenyl			46.2	49.8	93	70-135					
Lab Batch #	: 3090331	Sample: 625281-012 / SMP	Batch			10 100					
Units:	mg/kg	Date Analyzed: 05/25/19 21:56		RROGATE R		STUDY					
		CW/9015 Mad	Amount	True		Control					
	IFU	oy SW8015 Mod Analytes	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flags				
1-Chloroocta	16		92.4	99.8	93	70-135					
o-Terphenyl			39.9	49.9	80	70-135					
Lab Batch #	• 3090331	Sample: 625281-013 / SMP	Batch			10-155					
Units:	mg/kg	Date Analyzed: 05/25/19 22:21		RROGATE R		STUDY					
	TPH b	oy SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chloroocta	ne	1111119 005	98.1	100	98	70-135					
o-Terphenyl			41.3	50.0	83	70-135					
Lab Batch #	: 3090331	Sample: 625281-014 / SMP	Batch								
U <b>nits:</b>	mg/kg	Date Analyzed: 05/25/19 22:45		RROGATE R		STUDY					
	TPH I	oy SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags				
1-Chloroocta	ne		90.1	99.9	90	70-135					

* Surrogate outside of Laboratory QC limits

Released to Imaging: 7/22/2021 11:35:28 AM

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

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Lab Batch	#: 3090399	Sample: 625281-001 / SMP	Batcl	h: 1 Matrix	: 5011		
U <b>nits:</b>	mg/kg	Date Analyzed: 05/28/19 21:51	SU	RROGATE R	ECOVERY	STUDY	
	mg/kg Date Analyzed: 05/28/19 : BTEX by EPA 8021B Analytes probenzene huorobenzene h#: 3090399 Sample: 625281-00 mg/kg Date Analyzed: 05/28/19 : BTEX by EPA 8021B Analytes probenzene h#: 3090399 Sample: 625281-00 mg/kg Date Analyzed: 05/28/19 : BTEX by EPA 8021B Analytes probenzene h#: 3090399 Sample: 625281-00 mg/kg Date Analyzed: 05/28/19 : BTEX by EPA 8021B Analytes probenzene h#: 3090399 Sample: 625281-00 mg/kg Date Analyzed: 05/28/19 : BTEX by EPA 8021B Analytes probenzene h#: 3090399 Sample: 625281-00 mg/kg Date Analyzed: 05/28/19 : BTEX by EPA 8021B Analytes probenzene h#: 3090399 Sample: 625281-00 mg/kg Date Analyzed: 05/28/19 : BTEX by EPA 8021B Analytes	L by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluoro	benzene		0.0286	0.0300	95	70-130	
			0.0341	0.0300	114	70-130	
Lab Batch	#: 3090399	Sample: 625281-003 / SMP	Batcl	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/28/19 22:10	SU	RROGATE R	ECOVERY	STUDY	
			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage
1 4 Difluore		Anarytes	0.0294	0.0200		70.120	
· ·			0.0284	0.0300	95	70-130	
		Sample: 625281 005 / SMP	0.0357 Batcl	0.0300 h: 1 Matrix	119 	70-130	
Lab Batch Units:		-					
Units:	mg/kg	Date Analyzed: 03/28/19 22.29	SU	RROGATE R	ECOVERY	STUDY	
			Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage
		Analytes			[D]		
1,4-Difluoro	benzene		0.0282	0.0300	94	70-130	
			0.0355	0.0300	118	70-130	
Lab Batch	#: 3090399	Sample: 625281-006 / SMP	Batcl	h: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/28/19 22:48	SU	<b>RROGATE R</b>	ECOVERY	STUDY	
			Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
1,4-Difluoro	benzene		0.0284	0.0300	95	70-130	
4-Bromoflue	orobenzene		0.0355	0.0300	118	70-130	
Lab Batch	#: 3090399	Sample: 625281-007 / SMP	Batcl	h: 1 Matrix		I	1
Units:	mg/kg	Date Analyzed: 05/28/19 23:07	SU	RROGATE R	ECOVERY	STUDY	
		•	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flag
4 4 50 1 10		Analytes					
			0.0284	0.0300	95	70-130	
4-Bromoflue	orobenzene		0.0359	0.0300	120	70-130	

* 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: White Federal 1H Flowline (5-13-19)**

Lab Batch #:		Sample: 625281-008 / SMP	Batcl					
Units:	mg/kg	Date Analyzed: 05/28/19 23:26	SU	RROGATE R	ECOVERY S	STUDY		
	BTEX	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags	
		Analytes			[D]			
1,4-Difluoroben	zene		0.0278	0.0300	93	70-130		
4-Bromofluorob	enzene		0.0432	0.0300	144	70-130	**	
Lab Batch #:	3090399	Sample: 625281-010 / SMP	Batcl	h: 1 Matrix	: Soil			
Units:	mg/kg	Date Analyzed: 05/28/19 23:45	SU	RROGATE R	ECOVERY S	STUDY		
		A by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Difluoroben		Anaryus	0.0283	0.0300	94	70-130		
4-Bromofluorob			0.0283	0.0300	119	70-130		
Lab Batch #:		Sample: 625281-012 / SMP	Batcl			70-150		
	mg/kg	<b>Date Analyzed:</b> 05/29/19 00:04	SURROGATE RECOVERY STUDY					
			50	KKUGAIE K	LUVERI			
		Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Difluoroben		Analytes	0.0262	0.0200	87	70-130		
4-Bromofluorob			0.0262	0.0300	138	70-130	**	
Lab Batch #:		Sample: 625281-013 / SMP	Batcl			/0-150	4.4	
	mg/kg	Date Analyzed: 05/29/19 04:19						
omts.	ing/kg		50	RROGATE R	LCOVERY	STUDY		
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Difluoroben	zene		0.0313	0.0300	104	70-130		
4-Bromofluorob	enzene		0.0295	0.0300	98	70-130		
Lab Batch #:	3090434	Sample: 625281-014 / SMP	Batcl	h: 1 Matrix	: Soil			
Units:	mg/kg	Date Analyzed: 05/29/19 04:38	SU	RROGATE R	ECOVERY S	STUDY		
		X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flage	
140.0 1		Analytes	0.001 :	0.0700				
1,4-Difluoroben			0.0314	0.0300	105	70-130		
4-Bromofluorob	enzene		0.0310	0.0300	103	70-130		

* 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: White Federal 1H Flowline (5-13-19)

	rders : 62528 #: 3090331	1, <b>Sample:</b> 7678657-1-BLK / 1	BLK Bate		: 212C-MD-0	01765	
U <b>nits:</b>	mg/kg	Date Analyzed: 05/25/19 13:41	SU	RROGATE R	ECOVERY	STUDY	
	TPH I	oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1-Chlorooc	tane		98.7	100	99	70-135	
o-Terpheny	rl		51.8	50.0	104	70-135	
Lab Batch	#: 3090399	Sample: 7678713-1-BLK / ]	BLK Bate	h: 1 Matrix	: Solid		
U <b>nits:</b>	mg/kg	Date Analyzed: 05/28/19 16:50	SU	RROGATE R	ECOVERY	STUDY	
	втех	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluor	changana	Analytes	0.0207	0.0200		70.120	
,	obenzene		0.0306	0.0300	102	70-130	
	#: 3090434	Sample: 7678719-1-BLK / 1	0.0313 BLK Batc	0.0300 h: 1 Matrix	104 c: Solid	70-130	
		-					
Units:	mg/kg	Date Analyzed: 05/29/19 02:44	SU	RROGATE R	ECOVERY S	STUDY	
	BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes		[10]	[D]	/011	
1,4-Difluor	obenzene		0.0276	0.0300	92	70-130	
4-Bromoflu	orobenzene		0.0246	0.0300	82	70-130	
Lab Batch	#: 3090331	Sample: 7678657-1-BKS / ]	BKS Batc	h: 1 Matrix	: Solid		
Units:	mg/kg	Date Analyzed: 05/25/19 14:06	SU	RROGATE R	ECOVERY	STUDY	
	TPH	oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1 Chlanses	4	Analytes	07.4	100		70.105	
1-Chlorooc			97.4	100	97	70-135	
o-Terpheny	#: 3090399	Sample: 7678713-1-BKS / 1	54.6 BKS Batc	50.0	109 c: Solid	70-135	
		-					
Units:	mg/kg	Date Analyzed: 05/28/19 15:16	SU	RROGATE R	ECOVERY S	STUDY	
	BTEN	K by EPA 8021B	Amount Found	True Amount	Recovery	Control Limits	Flags
		Analytes	[A]	[B]	%R [D]	%R	
1.4-Difluor		Analytes	[A]	[ <b>B</b> ]		% <b>R</b>	

* 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: White Federal 1H Flowline (5-13-19)

Units:	mg/kg	Date Analyzed: 05/29/19 01:10	CT	RROGATE R	FCOVEDV	STUDV	
e mus.	ing/kg	<b>Date 11111/2011</b> 05/23/13/01.10	50	KKUGAIE K		STUDY	
	BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluor	obenzene		0.0307	0.0300	102	70-130	
4-Bromoflu	orobenzene		0.0281	0.0300	94	70-130	
Lab Batch	<b>#:</b> 3090331	Sample: 7678657-1-BSD /	BSD Bate	h: 1 Matrix	: Solid	<u>.</u>	
Units:	mg/kg	Date Analyzed: 05/25/19 14:31	SU	RROGATE R	ECOVERY	STUDY	
		oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1 Chlanser		Analytes	102	100		70.105	
1-Chlorooc			103	100	103	70-135	
o-Terpheny	#: 3090399	S	62.0	50.0	124	70-135	
		Sample: 7678713-1-BSD / 1					
Units:	mg/kg	Date Analyzed: 05/28/19 15:35	SU	RROGATE R	ECOVERY	STUDY	
	BTEX	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes	[ ¹ x]	[0]	[D]		
1,4-Difluor	obenzene		0.0271	0.0300	90	70-130	
4-Bromoflu	orobenzene		0.0302	0.0300	101	70-130	
Lab Batch	#: 3090434	Sample: 7678719-1-BSD /	BSD Bate	h: 1 Matrix	: Solid	1	
Units:	mg/kg	Date Analyzed: 05/29/19 01:29	SU	RROGATE R	ECOVERY	STUDY	
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluor		Anarytes	0.0313	0.0300	104	70-130	
	orobenzene		0.0313	0.0300	97	70-130	
	#: 3090331	Sample: 625271-001 S / MS				/0-130	
Units:	mg/kg	Date Analyzed: 05/25/19 15:21		RROGATE R		STUDV	
C 11163+		Luc mary 200 00/20/17 10.21	50	KUGAIE K	LECUVERY	51001	
	TPH I	oy SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flage
		Analytes			[D]		
1-Chlorooc	tane		83.2	99.9	83	70-135	
					1	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



Work Ord Lab Batch #:	ers: 62528	1, Sample: 625614-001 S / MS	Batch	-	212C-MD-0 Soil	01765	
Units:	mg/kg	<b>Date Analyzed:</b> 05/28/19 15:54		RROGATE R		STUDY	
	BTEX	۲ by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
		Analytes			[D]		
1,4-Difluorob	enzene		0.0276	0.0300	92	70-130	
4-Bromofluor	obenzene		0.0311	0.0300	104	70-130	
Lab Batch #	: 3090434	Sample: 625615-001 S / MS	Batch	n: 1 Matrix	: Soil		
Units:	mg/kg	Date Analyzed: 05/29/19 01:48	SU	RROGATE R	ECOVERY	STUDY	
		K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorob			0.0311	0.0300	104	70-130	
4-Bromofluor			0.0296	0.0300	99	70-130	
Lab Batch #:		Sample: 625271-001 SD / N					
Units:	mg/kg	Date Analyzed: 05/25/19 15:46		RROGATE R		STUDY	
	TDILL	w SW0015 Mod	Amount	True		Control	
	ITH	by SW8015 Mod Analytes	Found [A]	Amount [B]	Recovery %R [D]	Limits %R	Flags
1-Chlorooctar	ne		82.9	100	83	70-135	
o-Terphenyl			35.5	50.0	71	70-135	
Lab Batch #:	: 3090399	Sample: 625614-001 SD / N					
Units:	mg/kg	<b>Date Analyzed:</b> 05/28/19 16:13		RROGATE R		STUDY	
	BTEX	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorob	enzene	Anarytes	0.0276	0.0300	92	70-130	
4-Bromofluor			0.0332	0.0300	111	70-130	
Lab Batch #:		Sample: 625615-001 SD / N				10 150	
Units:	mg/kg	Date Analyzed: 05/29/19 02:07		RROGATE R		STUDY	
		X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
				i			
1,4-Difluorob			0.0310	0.0300	103	70-130	

* 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





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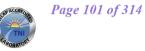
### **Project Name:** White Federal 1H Flowline (5-13-19)

Work Order #:         625281           Project ID:         212C-MD-01765												
Analyst: SCM	D	ate Prepar	ed: 05/28/201	Date A1	nalyzed: (	)5/28/2019						
Lab Batch ID: 3090399 Sample: 7678713-1	-BKS	Batcl	<b>h #:</b> 1					Matrix: S	Solid			
Units: mg/kg		BLAN	K/BLANK	SPIKE / I	BLANK S	SPIKE DUP	LICATE 1	RECOVI	ERY STUE	ЭY		
BTEX by EPA 8021B 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	
Benzene	<0.00200	0.0998	0.101	101	0.100	0.103	103	2	70-130	35		
Toluene	< 0.00200	0.0998	0.102	102	0.100	0.101	101	1	70-130	35		
Ethylbenzene	< 0.00200	0.0998	0.115	115	0.100	0.114	114	1	70-130	35		
m,p-Xylenes	< 0.00399	0.200	0.241	121	0.201	0.236	117	2	70-130	35		
o-Xylene	< 0.00200	0.0998	0.114	114	0.100	0.113	113	1	70-130	35		
Analyst: SCM	D	ate Prepar	ed: 05/28/201	9			Date Ar	nalyzed: (	)5/29/2019			
Lab Batch ID: 3090434 Sample: 7678719-1	-BKS	Batcl	<b>h #:</b> 1		Matrix: Solid							
Units: mg/kg		BLAN	K/BLANK	SPIKE / I	BLANK S	SPIKE DUP	LICATE 1	RECOVI	ERY STUE	)Y		
BTEX by EPA 8021B 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	
Benzene	< 0.000383	0.0996	0.103	103	0.0994	0.0997	100	3	70-130	35		
Toluene	<0.000454	0.0996	0.0954	96	0.0994	0.0915	92	4	70-130	35		
Ethylbenzene	< 0.000563	0.0996	0.101	101	0.0994	0.0956	96	5	70-130	35		
m,p-Xylenes	< 0.00101	0.199	0.207	104	0.199	0.198	99	4	70-130	35		
o-Xylene	< 0.000343	0.0996	0.102	102	0.0994	0.0998	100	2	70-130	35		

Relative Percent Difference RPD =  $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] =  $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] =  $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes

Version: 1.%





### **Project Name:** White Federal 1H Flowline (5-13-19)

Work Order	r #: 625281			ject ID:	212C-MD-(	01765									
Analyst:	CHE	D	ate Prepar	red: 05/23/201	9			Date A	nalyzed: (	)5/24/2019					
Lab Batch ID	<b>Sample:</b> 7678490-1-	-BKS	Bate	<b>h #:</b> 1					Matrix: S	Solid					
Units:	mg/kg		BLAN	K /BLANK S	SPIKE / ]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY				
	Chloride by EPA 300	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	246	98	250	246	98	0	90-110	20				
Analyst:	CHE			red: 05/23/201		230	Date Analyzed: 05/23/2019								
Lab Batch ID	<b>Sample:</b> 7678491-1-	-BKS	Bate	<b>h #:</b> 1					Matrix: S	Solid					
Units:	mg/kg		BLAN	VERY STUDY											
Anal	Chloride by EPA 300	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			
Anal	ytes	Sample Result	Added	Spike Result	Spike %R	Added	Spike Duplicate	Dup. %R		Limits	Limits	Flag			
	ytes	Sample Result [A] <5.00	<b>Added</b> [B] 250	Spike Result [C]	<b>Spike</b> %R [D] 103	Added [E]	Spike Duplicate Result [F]	Dup. %R [G] 104	<b>%</b>	Limits %R	Limits %RPD	Flag			
Chloride	ytes CHE	Sample Result [A] <5.00 D	Added [B] 250 ate Prepar	Spike Result [C] 258	<b>Spike</b> %R [D] 103	Added [E]	Spike Duplicate Result [F]	Dup. %R [G] 104 Date A	<b>%</b>	Limits %R 90-110 05/24/2019	Limits %RPD	Flag			
Chloride Analyst:	ytes CHE	Sample Result [A] <5.00 D	Added [B] 250 ate Prepar Batc	Spike Result [C] 258 red: 05/23/201	<b>Spike</b> % <b>R</b> [ <b>D</b> ] 103	<b>Added</b> [E] 250	Spike Duplicate Result [F] 259	Dup. %R [G] 104 Date A	% 0 nalyzed: ( Matrix: S	Limits %R 90-110 05/24/2019 Solid	Limits %RPD 20	Flag			
Chloride Analyst: Lab Batch ID	ytes CHE 3090088 Sample: 7678496-1- mg/kg Chloride by EPA 300	Sample Result [A] <5.00 D	Added [B] 250 ate Prepar Batc	Spike Result [C] 258 red: 05/23/201 h #: 1	<b>Spike</b> % <b>R</b> [ <b>D</b> ] 103	<b>Added</b> [E] 250	Spike Duplicate Result [F] 259	Dup. %R [G] 104 Date A	% 0 nalyzed: ( Matrix: S	Limits %R 90-110 05/24/2019 Solid	Limits %RPD 20	Flag			

Relative Percent Difference RPD =  $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] =  $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] =  $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes

Version: 1.%





### **Project Name:** White Federal 1H Flowline (5-13-19)

Work Order	r #: 625281							Proj	ect ID:	212C-MD-0	01765							
Analyst:	CHE	D	ate Prepar	ed: 05/28/20	19			Date A	nalyzed: (	)5/28/2019								
Lab Batch ID	<b>Sample:</b> 767864	8-1-BKS	Batcl	<b>h #:</b> 1					Matrix: S	Solid								
Units:	mg/kg		BLAN	K/BLANK	SPIKE / ]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY							
	Chloride by EPA 300	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						
Analy	ytes					250												
Chloride		< 0.858	250	237	95	238	95	0	90-110	20								
									Date Prepared: 05/25/2019 Date Analyzed: 0									
Analyst:	ARM	D	ate Prepar	ed: 05/25/20	19	ļ	1	Date A	nalyzed: (	)5/25/2019		ļ						
Analyst: Lab Batch ID			-	red: 05/25/20 h #: 1	19	-	1		nalyzed: ( Matrix: S		ļ	ļ						
-			Batcl			BLANKS	SPIKE DUP		Matrix: S	Solid	DY	·						
Lab Batch ID	e: 3090331 Sample: 767865 mg/kg TPH by SW8015 Mod		Batcl	h#: 1		BLANK S Spike Added [E]	SPIKE DUP Blank Spike Duplicate Result [F]		Matrix: S	Solid	DY Control Limits %RPD	Flag						
Lab Batch ID Units: Analy	e: 3090331 Sample: 767865 mg/kg TPH by SW8015 Mod	7-1-BKS Blank Sample Result	Batcl BLAN Spike Added	h #: 1 K /BLANK Blank Spike Result	SPIKE / ] Blank Spike %R	Spike Added	Blank Spike Duplicate	LICATE	Matrix: S RECOV	Solid ERY STUI Control Limits	Control Limits	Flag						

Relative Percent Difference RPD =  $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] =  $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] =  $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes

Version: 1.%





### **Project Name: White Federal 1H Flowline (5-13-19)**

Work Order # :	625281						Project II	<b>):</b> 212C-N	MD-0176	5		
Lab Batch ID:	3090399	QC- Sample ID:	625614-	001 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	05/28/2019	Date Prepared:	05/28/20	)19	An	alyst: S	SCM					
<b>Reporting Units:</b>	mg/kg		Μ	ATRIX SPIKI	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]	Kesut [F]	[G]	/0	701		
Benzene		<0.00200	0.100	0.0761	76	0.101	0.0652	65	15	70-130	35	X
Toluene		<0.00200	0.100	0.0766	77	0.101	0.0741	73	3	70-130	35	
Ethylbenzene		<0.00200	0.100	0.0856	86	0.101	0.0751	74	13	70-130	35	
m,p-Xylenes		<0.00401	0.200	0.180	90	0.201	0.136	68	28	70-130	35	X
o-Xylene		<0.00200	0.100	0.0855	86	0.101	0.0629	62	30	70-130	35	X
Lab Batch ID:	3090434	QC- Sample ID:	625615-	001 S	Ba	tch #:	1 Matrix	<b>::</b> Soil				
Date Analyzed:	05/29/2019	Date Prepared:	05/28/20	)19	An	alyst: S	SCM					
<b>Reporting Units:</b>	mg/kg		Μ	ATRIX SPIKI	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		<0.000386	0.100	0.101	101	0.0992	0.106	107	5	70-130	35	
Toluene		<0.000457	0.100	0.0928	93	0.0992	0.0970	98	4	70-130	35	
Ethylbenzene		<0.000566	0.100	0.0967	97	0.0992	0.102	103	5	70-130	35	
m,p-Xylenes		<0.00102	0.200	0.200	100	0.198	0.208	105	4	70-130	35	
o-Xylene		0.000360	0.100	0.0987	98	0.0992	0.100	100	1	70-130	35	

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.

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### **Project Name: White Federal 1H Flowline (5-13-19)**

Work Order # :	625281						Project II	<b>D:</b> 212C-1	MD-0176	5		
Lab Batch ID:	3090081	QC- Sample ID:	625281	-012 S	Ba	tch #:	1 Matrix	<b>x:</b> Soil				
Date Analyzed:	05/24/2019	Date Prepared:	05/23/2	019	Ar	alyst: (	CHE					
<b>Reporting Units:</b>	mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	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]	Kesutt [F]	[G]	/0	701		
Chloride		71.1	250	317	98	250	320	100	1	90-110	20	
Lab Batch ID:	3090081	QC- Sample ID:	625281	-013 S	Ba	tch #:	1 Matrix	<b>x:</b> Soil				
Date Analyzed:	05/24/2019	Date Prepared:	05/23/2	019	Ar	alyst: (	CHE					
<b>Reporting Units:</b>	mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	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]		70K [D]	[E]	Kesun [F]	[G]	70	70K	70KI D	
Chloride		48.2	248	274	91	248	292	98	6	90-110	20	
Lab Batch ID:	3090083	C- Sample ID:	625280	-037 S	Ba	tch #:	1 Matrix	x: Soil				
Date Analyzed:	05/23/2019	Date Prepared:	05/23/2	019	Ar	alyst: (	CHE					
<b>Reporting Units:</b>	mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	70K	%KrD	
Chloride		564	251	810	98	251	807	97	0	90-110	20	

Matrix Spike Percent Recovery  $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference RPD =  $200^{\circ}[(C-F)/(C+F)]$  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.

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### **Project Name: White Federal 1H Flowline (5-13-19)**

Work Order # :	625281						Project II	<b>D:</b> 212C-1	MD-0176	5			
Lab Batch ID:	3090083	C- Sample ID:	625280	-041 S	Ba	tch #:	1 Matrix	<b>x:</b> Soil					
Date Analyzed:	05/23/2019	Date Prepared:	05/23/2	019	Ar	alyst: (	CHE						
<b>Reporting Units:</b>	mg/kg		Μ	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY			
	Chloride by EPA 300	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]	Kesutt [F]	[G]	/0	/01	70KI D		
Chloride		1120	250	1320	80	250	1320	80	0	90-110	20	X	
Lab Batch ID:	3090088	C- Sample ID:	625281	-004 S	Ba	tch #:	1 Matrix	<b>x:</b> Soil					
Date Analyzed:	05/24/2019	Date Prepared:	05/23/2	019	Ar	alyst: (	CHE						
<b>Reporting Units:</b>	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY			
	Chloride by EPA 300	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]		/0K [D]	[E]	Kesun [F]	[G]	/0	70K	70KI D		
Chloride		276	248	458	73	248	515	96	12	90-110	20	Х	
Lab Batch ID:	3090088	C- Sample ID:	625335	-001 S	Ba	tch #:	1 Matrix	x: Soil					
Date Analyzed:	05/24/2019	Date Prepared:	05/23/2	019	Ar	alyst: (	CHE						
<b>Reporting Units:</b>	mg/kg												
	Chloride by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag	
	Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%0K	70KPD		
Chloride		< 0.865	252	246	98	252	246	98	0	90-110	20		

Matrix Spike Percent Recovery  $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference RPD =  $200^{\circ}[(C-F)/(C+F)]$  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.

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### **Project Name: White Federal 1H Flowline (5-13-19)**

Work Order # :	625281						Project II	<b>):</b> 212C-1	MD-0176	5			
Lab Batch ID:	3090379	QC- Sample ID:	625611	-001 S	Ba	tch #:	1 Matrix	<b>k:</b> Soil					
Date Analyzed:	05/28/2019	Date Prepared:	05/28/2	019	An	alyst: (	CHE						
<b>Reporting Units:</b>	mg/kg		Ν	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY			
	Chloride by EPA 300	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]	[C]	[D]	[E]	Kesun [F]	[G]	70	70K	70KI D		
Chloride		23.4	250	257	93	250	259	94	1	90-110	20		
Lab Batch ID:	3090379	QC- Sample ID:	625616	-008 S	Ba	tch #:	1 Matrix	<b>k:</b> Soil		·			
Date Analyzed:	05/28/2019	Date Prepared:	05/28/2	019	An	alyst: (	CHE						
<b>Reporting Units:</b>	mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
	Chloride by EPA 300	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		371	251	595	89	251	594	89	0	90-110	20	X	
Lab Batch ID:	3090331	QC- Sample ID:	625271	-001 S	Ba	tch #:	1 Matrix	k: Soil					
Date Analyzed:	05/25/2019	Date Prepared:	05/25/2	019	An	alyst: A	ARM						
<b>Reporting Units:</b>	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY			
,	TPH by SW8015 Mod	Parent Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag	
	Analytes	[A]	Added [B]	[C]	%R [D]	E]	Result [F]	%K [G]	70	70K	70KFD		
Gasoline Range	Hydrocarbons (GRO)	8.90	999	877	87	1000	869	86	1	70-135	20		
Diesel Range O	rganics (DRO)	9.43	999	822	81	1000	829	82	1	70-135	20		

Matrix Spike Percent Recovery  $[D] = 100^{\circ}(C-A)/B$ Relative Percent Difference RPD =  $200^{\circ}[(C-F)/(C+F)]$  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.

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	y: Date: Time:		y: Date: Time:	5-33-19	Horizontal SE-1 (1-1.5	Horizontal SE-1 (0-1')	Horizontal NW-6 (1'-1.5')	Horizontal NW-6 (0-1')	Horizontal NW-5 (0-1')	Horizontal NW-4 (0-1')	Horizontal NW-3 (0-1')	Horizontal NW-2 (1'-1.5')	Horizontal NW-2 (0-1')	Horizontal NW-1 (1'-1.5')	Horizontal NW-1 (0-1')		SAMPLE IDENTIFICATION		Run deeper samples if TPH (GRO + DRO + MRO) exceeds 1,000 mg/kg. run deeper samples if ben 10 mg/kg or Total BTEX exceeds 50 mg/kg.	atory: Xenco	lke Tavarez	: (county, Eddy County, New Mexico		COG	Tetra Tech, Inc.	4 107 of 314 Analysis Request of Chain of Custody Record
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	Date: Time:		Date: Time:	S Date: Time	X X	X X	×	×	×	×	×	X X	×	X X		WATER SOIL HCL HNO ₃ ICE		MATRIX PRESERVATI	un deeper samples if bei	Devin Dominguez		212C-MD-01765		Mike Carmona	900 West Wall Street, Ste 100 Midland,Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946	
	<u>e</u>				1 N	-1 Z	-1 Z	-1 Z	-1 Z	-1 Z	-1 Z	-1 Z	-1 Z	1 N	1 N	None # CONTA FILTERE	D (Y		zene exceeds						20	6
(Circle) HAND DELIVERED	3:515-1	Sample Temperature				××				××	××		××		×	BTEX 802 TPH TX1 TPH 8019 PAH 8270 Total Metz TCLP Met TCLP Vola	005 5M ( DC als A als A	(Ext to GRO - g As B Ag As B	DRO - C	DRO - N Pb Se I	łg			A		1361
FEDEX UPS Tracking #:	Special Report Lim	Rush Charges Authorized	X RUSH: Same Day	REMARKS:												TCLP Sen RCI GC/MS Vc GC/MS Se PCB's 800 NORM	ol. 8 emi. ' 82 / (	260B / Vol. 8/ 608	624	5			or specify Method			-
iQ #:	Special Report Limits or TRRP Report		y 24 hr 48 hr 72 hr	)	×	×	×	×	×	×	×	×	×	×	×	PLM (Asb Chloride Chloride General V Anion/Cat TPH 8015	St Vate	ulfate er Chei		ee atta	ched li	st)	10d No.)			Page <u>1</u> of
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	elinquished by:		Relinquished by:		alinnuie										LAB USE ONLY	LAB #		Comments:	Receiving Laboratory:	Invoice to:	Project Location: state)	Project Name:	Client Name:	(s)	nalys
	ned by:		hed by:	17 Y	hod hy										se )	*	·		Labora		cation:	Me:	Ë		is Re
				Y.														Run deeper s 10 mg/kg or T	tory: Xenco		(county, Ed		500		quest of Chai
	Date: Time:			2-22-19							Horizontal SE-4 (1'-1.5')	Horizontal SE-4 (0-1')	Horizontal SE-3 (0-1')	Horizontal SE-2 (0-1')		SAMPLE IDENTIFICATION		Run deeper samples if TPH (GRO + DRO + MRO) e: 10 mg/kg or Total BTEX exceeds 50 mg/kg.	100	lke Tavarez	Eddy County, New Mexico	White Federal 1H Flowline (5-13-19)	G	Tetra Tech, Inc.	4 108 of 314 Analysis Request of Chain of Custody Record
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СОРҮ				5											TIME		LING	g/kg. ru	lure:						
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	Date:		Date:	- Joan							×	×	×		SOIL		MATRIX	er sam	Devin Dominguez		212C-MD-01765		Mike Carmona	900 West Wall Street, Ste 1 Midland, Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946	
	te:		ie:	i											HNO ₃		PRESI ME	iples i	oming		D-017		ona	all Street, Texas 79 2) 682-45 2) 682-39	
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Received by OCD: 5/14/2021 10:15:53 AM



## **XENCO** Laboratories



#### Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 05/23/2019 10:48:00 AM Temperature Measuring device used : R8 Work Order #: 625281 Comments Sample Receipt Checklist 3.1 #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)? N/A #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: Biuma Teel

Date: 05/23/2019

Checklist reviewed by: Jession Vramer

Jessica Kramer

Date: 05/28/2019

# Analytical Report 628192

for Tetra Tech- Midland

**Project Manager: Mike Carmona** 

White Fed 1H Flowline

212C-MD-01765

25-JUN-19

Collected By: Client





1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429), North Carolina (483)





25-JUN-19

Project Manager: **Mike Carmona Tetra Tech- Midland** 901 West Wall ST Midland, TX 79701

Reference: XENCO Report No(s): 628192 White Fed 1H Flowline Project Address: Eddy Co,NM

#### Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 628192. 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. 628192 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,

Jession Vermer

Jessica Kramer Project Assistant

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

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#### Sample Id

ATT #1 (0, 1!)
AH #1 (0-1')
AH #1 (1-1.5')
AH #1 (2-2.5')
AH #1 (3-3.5')
AH #2 (0-1')
AH #2 (1-1.5')
AH #3 (0-1')
AH #3 (1-1.5')
AH #4 (0-1')
AH #4 (1-1.5')
AH #4 (2-2.5')
AH #5 (0-1')
AH #5(1-1.5')
AH #5 (2-2.5')
AH #5 (3-3.5')
AH #6 (0-1')
AH #6 (1-1.5')
AH #6 (2-2.5')
AH #6 (3-3.5')
AH #6 (4-4.5')
AH #6 (5-5.5')
AH #7 (0-1')
AH #7 (1-1.5')
AH #7 (2-2.5')
AH #8 (0-1')
AH #8 (1-1.5')
AH #8 (2-2.5')
AH #9 (0-1')
AH #9 (1-1.5')
AH #9 (2-2.5')
AH #9 (3-3.5')
AH #10 (0-1')
AH #10 (1-1.5')
AH #10 (2-2.5')
AH #11 (0-1')
AH #11 (1-1'.5)
AH #11 (2-2.5')
AH #11 (3-3.5')
AH #12 (0-1')
AH #12 (0-1)
AH #13 (0-1')
AH #13 (1-1.5')

## Sample Cross Reference 628192



White Fed 1H Flowline

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	06-18-19 00:00		628192-001
S	06-18-19 00:00		628192-002
S	06-18-19 00:00		628192-003
S	06-18-19 00:00		628192-004
S	06-18-19 00:00		628192-005
S	06-18-19 00:00		628192-006
S	06-18-19 00:00		628192-007
S	06-18-19 00:00		628192-008
S	06-18-19 00:00		628192-009
S	06-18-19 00:00		628192-010
S	06-18-19 00:00		628192-011
S	06-18-19 00:00		628192-012
S	06-18-19 00:00		628192-013
S	06-18-19 00:00		628192-014
S	06-18-19 00:00		628192-015
S	06-18-19 00:00		628192-016
S	06-18-19 00:00		628192-017
S	06-18-19 00:00		628192-018
S	06-18-19 00:00		628192-019
S	06-18-19 00:00		628192-020
S	06-18-19 00:00		628192-021
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S	06-18-19 00:00		628192-029
S	06-18-19 00:00		628192-030
S	06-18-19 00:00		628192-031
S	06-18-19 00:00		628192-032
S	06-18-19 00:00		628192-033
S	06-18-19 00:00		628192-034
S	06-18-19 00:00		628192-035
S	06-18-19 00:00		628192-036
S	06-18-19 00:00		628192-037
S	06-18-19 00:00		628192-038
S	06-18-19 00:00		628192-039
S	06-18-19 00:00		628192-040
S	06-18-19 00:00		628192-041
S	06-18-19 00:00		628192-042
S	06-18-19 00:00		628192-043



AH #13 (2-2.5')



Sample Cross Reference 628192



## Tetra Tech- Midland, Midland, TX

White Fed 1H Flowline

S	06-18-19 00:00	628192-044
S	06-18-19 00:00	628192-045

AH #14 (0-1') AH #14 (1-1.5')



## CASE NARRATIVE

Client Name: Tetra Tech- Midland Project Name: White Fed 1H Flowline

Project ID: 212C-MD-01765 Work Order Number(s): 628192 Report Date: 25-JUN-19 Date Received: 06/19/2019

#### Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

#### Analytical non conformances and comments:

Batch: LBA-3092996 Chloride by EPA 300

Lab Sample ID 628192-026 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 628192-018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037. The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was

Batch: LBA-3093264 Chloride by EPA 300

Lab Sample ID 628335-006 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 628192-043, -044, -045. The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was

accepted.

accepted.



## Certificate of Analysis Summary 628192

Tetra Tech- Midland, Midland, TX Project Name: White Fed 1H Flowline



Date Received in Lab:Wed Jun-19-19 11:40 amReport Date:25-JUN-19Project Manager:Jessica Kramer

	Lab Id:	628192-0	01	628192-0	02	628192-0	003	628192-0	04	628192-0	005	628192-0	06
Analysis Requested	Field Id:	AH #1 (0	-1')	AH #1 (1-	1.5')	AH #1 (2-2	2.5')	AH #1 (3-3	3.5')	AH #2 (0	-1')	AH #2 (1-1	1.5')
Analysis Kequesiea	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-18-19 (	00:00	Jun-18-19	00:00	Jun-18-19 0	00:00						
Chloride by EPA 300	Extracted:	Jun-19-19	19:00	Jun-19-19 1	9:00	Jun-19-19 1	9:00	Jun-19-19 1	9:00	Jun-19-19	19:00	Jun-19-19 1	9:00
	Analyzed:	Jun-19-19 2	20:51	Jun-19-19 2	20:56	Jun-19-19 2	21:13	Jun-19-19 2	1:19	Jun-19-19	21:24	Jun-19-19 2	1:30
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		36.9	4.99	680	4.96	34.9	5.00	2430	25.0	1090	5.01	2110	24.9

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## Certificate of Analysis Summary 628192

Tetra Tech- Midland, Midland, TX Project Name: White Fed 1H Flowline



Date Received in Lab:Wed Jun-19-19 11:40 amReport Date:25-JUN-19Project Manager:Jessica Kramer

	Lab Id:	628192-0	07	628192-0	08	628192-0	09	628192-0	10	628192-0	)11	628192-0	12
Analysis Requested	Field Id:	AH #3 (0	-1')	AH #3 (1-	1.5')	AH #4 (0-	-1')	AH #4 (1-1	1.5')	AH #4 (2-2	2.5')	AH #5 (0-	-1')
Anulysis Kequesleu	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-18-19 (	00:00	Jun-18-19 (	00:00	Jun-18-19 (	0:00	Jun-18-19 (	0:00	Jun-18-19 (	00:00	Jun-18-19 0	0:00
Chloride by EPA 300	Extracted:	Jun-19-19	9:00	Jun-19-19 1	9:00	Jun-19-19 1	9:00	Jun-19-19 1	9:00	Jun-19-19 1	9:00	Jun-19-19 1	9:00
	Analyzed:	Jun-19-19 2	21:41	Jun-19-19 2	21:35	Jun-19-19 2	1:57	Jun-19-19 2	2:03	Jun-19-19 2	22:19	Jun-19-19 2	2:25
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		171	4.96	2250	25.0	61.6	5.04	78.9	5.03	1390	5.03	38.2	5.02

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## Certificate of Analysis Summary 628192

Tetra Tech- Midland, Midland, TX Project Name: White Fed 1H Flowline



Date Received in Lab:Wed Jun-19-19 11:40 amReport Date:25-JUN-19Project Manager:Jessica Kramer

	Lab Id:	628192-0	13	628192-0	14	628192-0	15	628192-0	16	628192-0	017	628192-0	18
Analysis Requested	Field Id:	AH #5(1-1	.5')	AH #5 (2-2	2.5')	AH #5 (3-3	3.5')	AH #6 (0-	-1')	AH #6 (1-	1.5')	AH #6 (2-2	2.5')
Analysis Kequestea	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-18-19 (	00:00	Jun-18-19 (	00:00	Jun-18-19 (	0:00	Jun-18-19 0	0:00	Jun-18-19 (	00:00	Jun-18-19 0	0:00
Chloride by EPA 300	Extracted:	Jun-19-19 1	9:00	Jun-19-19 1	9:00	Jun-19-19 1	9:00	Jun-19-19 1	9:00	Jun-19-19 1	9:00	Jun-19-19 1	9:30
	Analyzed:	Jun-19-19 2	2:30	Jun-19-19 2	2:36	Jun-19-19 2	2:41	Jun-19-19 2	2:47	Jun-19-19 2	22:52	Jun-19-19 2	3:42
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		4260	25.2	8060	50.3	7510	49.5	63.4	5.04	96.5	5.04	1700	25.0

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## Certificate of Analysis Summary 628192

Tetra Tech- Midland, Midland, TX Project Name: White Fed 1H Flowline



Date Received in Lab:Wed Jun-19-19 11:40 amReport Date:25-JUN-19Project Manager:Jessica Kramer

	Lab Id:	628192-0	19	628192-0	20	628192-0	21	628192-0	22	628192-0	23	628192-0	24
Analysis Requested	Field Id:	AH #6 (3-3	5.5')	AH #6 (4-4	.5')	AH #6 (5-5	5.5')	AH #7 (0-	-1')	AH #7 (1-	1.5')	AH #7 (2-2	2.5')
Analysis Kequeslea	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-18-19 0	0:00	Jun-18-19 0	0:00	Jun-18-19 0	0:00	Jun-18-19 0	0:00	Jun-18-19 (	00:00	Jun-18-19 0	00:00
Chloride by EPA 300	Extracted:	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30
	Analyzed:	Jun-19-19 2	3:48	Jun-19-19 2	3:53	Jun-19-19 2	3:59	Jun-20-19 0	0:15	Jun-20-19 (	0:21	Jun-20-19 1	9:27
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		11100	100	11600	100	6650	49.5	716	4.96	1890	25.0	5570	24.9

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## Certificate of Analysis Summary 628192

Tetra Tech- Midland, Midland, TX Project Name: White Fed 1H Flowline



Date Received in Lab:Wed Jun-19-19 11:40 amReport Date:25-JUN-19Project Manager:Jessica Kramer

	Lab Id:	628192-0	25	628192-0	26	628192-027		628192-028		628192-029		628192-0	30
Analysis Requested	Field Id:	AH #8 (0	-1')	AH #8 (1-1.5')		AH #8 (2-2.5')		AH #9 (0-1')		AH #9 (1-1.5')		AH #9 (2-2	2.5')
Anuiysis Kequesieu	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-18-19 (	00:00	Jun-18-19 (	00:00	Jun-18-19 0	0:00	Jun-18-19 (	00:00	Jun-18-19	00:00	Jun-18-19 0	00:00
Chloride by EPA 300	Extracted:	Jun-19-19	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19	9:30	Jun-19-19 1	9:30
	Analyzed:	Jun-20-19 (	00:26	Jun-20-19 0	0:43	Jun-20-19 0	0:32	Jun-20-19 0	0:37	Jun-20-19 (	00:59	Jun-20-19 0	1:05
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		48.6	5.01	542	5.00	12300	100	2110	25.0	7050	50.0	5920	50.3

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## Certificate of Analysis Summary 628192

Tetra Tech- Midland, Midland, TX Project Name: White Fed 1H Flowline



Date Received in Lab:Wed Jun-19-19 11:40 amReport Date:25-JUN-19Project Manager:Jessica Kramer

	Lab Id:	628192-0	31	628192-0	32	628192-0	33	628192-0	34	628192-0	35	628192-0	36
Analysis Requested	Field Id:	AH #9 (3-3	3.5')	AH #10 (0	-1')	AH #10 (1-	1.5')	AH #10 (2-	2.5')	AH #11 (0	)-1')	AH #11 (1-	1'.5)
Analysis Kequestea	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-18-19 0	0:00	Jun-18-19 (	0:00	Jun-18-19 0	0:00	Jun-18-19 0	0:00	Jun-18-19 (	00:00	Jun-18-19 0	00:00
Chloride by EPA 300	Extracted:	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30	Jun-19-19 1	9:30
	Analyzed:	Jun-20-19 0	1:22	Jun-20-19 0	1:27	Jun-20-19 0	1:33	Jun-20-19 0	1:38	Jun-20-19 0	01:44	Jun-20-19 0	1:49
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9710	49.6	72.3	5.03	454	5.02	623	5.05	52.2	5.05	501	5.00

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## Certificate of Analysis Summary 628192

Tetra Tech- Midland, Midland, TX Project Name: White Fed 1H Flowline



Date Received in Lab: Wed Jun-19-19 11:40 am Report Date: 25-JUN-19 Project Manager: Jessica Kramer

	Lab Id:	628192-0	37	628192-0	38	628192-0	39	628192-0	40	628192-0	041	628192-0	42
Analysis Requested	Field Id:	AH #11 (2-	2.5')	AH #11 (3-	3.5')	AH #12 (0	-1')	AH #12 (1-	1.5')	AH #13 ((	)-1')	AH #13 (1-	1.5')
Anulysis Kequesieu	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-18-19 (	00:00	Jun-18-19 (	00:00	Jun-18-19 (	0:00	Jun-18-19 (	0:00	Jun-18-19	00:00	Jun-18-19 0	00:00
Chloride by EPA 300	Extracted:	Jun-19-19	19:30	Jun-20-19 1	8:30	Jun-20-19 1	8:30	Jun-20-19 1	8:30	Jun-20-19	18:30	Jun-20-19 1	8:30
	Analyzed:	Jun-20-19 (	)1:55	Jun-21-19 0	3:36	Jun-21-19 0	3:44	Jun-21-19 0	3:51	Jun-21-19	03:58	Jun-21-19 0	4:05
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		8560	49.8	3330	25.2	15.8	4.99	1470	5.04	37.4	5.04	34.2	4.96

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Jessica Kramer Project Assistant



## Certificate of Analysis Summary 628192

Tetra Tech- Midland, Midland, TX Project Name: White Fed 1H Flowline



Date Received in Lab: Wed Jun-19-19 11:40 am Report Date: 25-JUN-19 Project Manager: Jessica Kramer

	Lab Id:	628192-0	43	628192-0	44	628192-0	45			
Analysis Requested	Field Id:	AH #13 (2-	2.5')	AH #14 (0	)-1')	AH #14 (1-	1.5')			
Anuiysis Kequesieu	Depth:									
	Matrix:	SOIL		SOIL		SOIL				
	Sampled:	Jun-18-19 (	00:00	Jun-18-19 (	00:00	Jun-18-19 0	0:00			
Chloride by EPA 300	Extracted:	Jun-21-19 1	0:50	Jun-21-19 1	.0:50	Jun-21-19 1	0:50			
	Analyzed:	Jun-21-19 1	1:14	Jun-21-19 1	1:29	Jun-21-19 1	1:34			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Chloride		635	4.99	24.9	5.03	6.77	4.96			

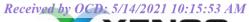
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# LABORATORIES

## **Flagging Criteria**



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- 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 LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

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



## **BS / BSD Recoveries**



#### **Project Name:** White Fed 1H Flowline

Work Order	<b>: #:</b> 628192							Pro	ject ID: 2	212C-MD-(	)1765	
Analyst:	SPC	D	ate Prepar	red: 06/19/201	9			Date A	nalyzed: (	06/19/2019		
Lab Batch ID	: 3092993 Sample: 7680344-1-	BKS	Batcl	<b>h #:</b> 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK S	SPIKE / 1	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	ΟY	
Analy	Chloride by EPA 300 vtes	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	256	102	250	256	102	0	90-110	20	
Analyst:	SPC	D	ate Prepar	red: 06/19/201	9			Date A	nalyzed: (	06/19/2019		
Lab Batch ID	<b>:</b> 3092996 <b>Sample:</b> 7680345-1-	BKS	Batcl	<b>h #:</b> 1					Matrix: S	Solid		
Units:	mg/kg		BLAN	K /BLANK S	SPIKE / ]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUE	ΟY	
Analy	Chloride by EPA 300	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
Analy	·	Sample Result	Added	Spike Result	Spike %R	Added	Spike Duplicate	Dup. %R		Limits	Limits	Flag
	·	Sample Result [A] <5.00	<b>Added</b> [B] 250	Spike Result [C]	<b>Spike</b> %R [D] 102	Added [E]	Spike Duplicate Result [F]	Dup. %R [G] 102	<b>%</b> 0	Limits %R	Limits %RPD	Flag
Chloride	ytes SPC	Sample Result [A] <5.00 D	Added [B] 250 ate Prepar	Spike Result [C] 256	<b>Spike</b> %R [D] 102	Added [E]	Spike Duplicate Result [F]	Dup. %R [G] 102	<b>%</b> 0	Limits %R 90-110 06/21/2019	Limits %RPD	Flag
Chloride Analyst:	ytes SPC	Sample Result [A] <5.00 D	Added [B] 250 ate Prepar Batcl	Spike Result [C] 256 red: 06/20/201	<b>Spike</b> % <b>R</b> [ <b>D</b> ] 102	<b>Added</b> [E] 250	Spike Duplicate Result [F] 256	Dup. %R [G] 102 Date A	% 0 nalyzed: ( Matrix: S	Limits %R 90-110 06/21/2019 Solid	Limits %RPD 20	Flag
Chloride Analyst: Lab Batch ID	SPC : 3093095 Sample: 7680431-1- mg/kg Chloride by EPA 300	Sample Result [A] <5.00 D	Added [B] 250 ate Prepar Batcl	Spike Result [C] 256 red: 06/20/201 h #: 1	<b>Spike</b> % <b>R</b> [ <b>D</b> ] 102	<b>Added</b> [E] 250	Spike Duplicate Result [F] 256	Dup. %R [G] 102 Date A	% 0 nalyzed: ( Matrix: S	Limits %R 90-110 06/21/2019 Solid	Limits %RPD 20	Flag

Relative Percent Difference RPD =  $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] =  $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] =  $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



## **BS / BSD Recoveries**

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.

## **Project Name: White Fed 1H Flowline**

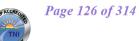
Work Order	·#: 628192								Proj	ect ID:	212C-MD-(	01765	
Analyst:	SPC		D	ate Prepar	ed: 06/21/20	19			Date A	nalyzed: (	06/21/2019		
Lab Batch ID	: 3093264	Sample: 7680446-1-	-BKS	Batch	<b>#:</b> 1					Matrix: S	Solid		
Units:	mg/kg			BLAN	K/BLANK	SPIKE / ]	BLANK S	SPIKE DUP	LICATE	RECOV	ERY STUI	DY	
Angly	Chloride by EPA	. 300	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
Analy	les												
Chloride			<5.00	250	246	98	250	238	95	3	90-110	20	

Relative Percent Difference RPD =  $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] =  $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] =  $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



## Form 3 - MS / MSD Recoveries

#### **Project Name: White Fed 1H Flowline**



<b>Work Order # :</b> 628192						Project II	<b>):</b> 212C-1	MD-0176	5		
<b>Lab Batch ID:</b> 3092993	QC- Sample II	<b>D:</b> 628187	-003 S	Ba	tch #:	1 Matrix	<b>x:</b> Soil				
Date Analyzed: 06/19/20	9 Date Prepare	<b>d:</b> 06/19/2	019	An	alyst: S	SPC					
<b>Reporting Units:</b> mg/kg		Ν	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Chloride	by EPA 300 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
Anal		[B]	[C]	⁷ 6K [D]	E]	Kesun [r]	%K [G]	70	70K	70KPD	
Chloride	4.75	248	242	96	248	242	96	0	90-110	20	
Lab Batch ID: 3092993	QC- Sample II	<b>D:</b> 628192	-007 S	Ba	tch #:	1 Matrix	<b>k:</b> Soil				
Date Analyzed: 06/19/20	9 Date Prepare	<b>d:</b> 06/19/2	019	An	alyst: S	SPC					
<b>Reporting Units:</b> mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Chloride	by EPA 300 Parent Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Anal		[B]	[C]	⁷ 0K [D]	E]	Kesun [r]	%K [G]	70	70K	70KPD	
Chloride	171	248	408	96	248	410	96	0	90-110	20	
Lab Batch ID: 3092996	QC- Sample II	<b>D:</b> 628192	-024 S	Ba	tch #:	1 Matrix	<b>x:</b> Soil				
Date Analyzed: 06/20/20	9 Date Prepare	<b>d:</b> 06/19/2	.019	An	alyst: S	SPC					
Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
Chloride	by EPA 300 Parent Sample Result	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Ana		Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride	5570	249	5760	76	249	5760	76	0	90-110	20	X

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.

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## Form 3 - MS / MSD Recoveries

#### **Project Name: White Fed 1H Flowline**



Work Order # :	628192						Project II	<b>):</b> 212C-N	MD-0176	5		
Lab Batch ID:	3092996	QC- Sample ID:	628192	-026 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	06/20/2019	Date Prepared:	06/19/2	019	An	alyst: S	SPC					
<b>Reporting Units:</b>	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	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]	[C]	50K [D]	[E]	Kesult [F]	% <b>K</b> [G]	-70	70K	70KPD	
Chloride		542	250	789	99	250	786	98	0	90-110	20	
Lab Batch ID:	3093095	QC- Sample ID:	628450	-021 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	06/21/2019	Date Prepared:	06/20/2	019	An	alyst: S	SPC					
<b>Reporting Units:</b>	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	[B]	[C]	⁷ 0K [D]	[E]	Kesun [F]	[G]	-70	70K	70KPD	
Chloride		46.0	249	299	102	249	299	102	0	90-110	20	
Lab Batch ID:	3093095	QC- Sample ID:	628450	-031 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	06/21/2019	Date Prepared:	06/20/2	019	An	alyst: S	SPC					
<b>Reporting Units:</b>	mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	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		16.8	249	277	104	249	277	104	0	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

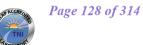
ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

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## Form 3 - MS / MSD Recoveries

#### **Project Name: White Fed 1H Flowline**



Work Order # :	628192						Project II	<b>):</b> 212C-N	MD-0176	5		
Lab Batch ID:	3093264	QC- Sample ID:	628192	-043 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	06/21/2019	Date Prepared:	06/21/2	019	An	alyst: S	SPC					
<b>Reporting Units:</b>	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	Parent Sample	Spike	Spiked Sample Result	Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
	Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
Chloride		635	250	821	74	250	822	75	0	90-110	20	Х
Lab Batch ID:	3093264	QC- Sample ID:	628335	-006 S	Ba	tch #:	1 Matrix	: Soil				
Date Analyzed:	06/21/2019	Date Prepared:	06/21/2	019	An	alyst: S	SPC					
<b>Reporting Units:</b>	mg/kg		Μ	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
	Chloride by EPA 300	Parent Sample Result	Spike Added	Spiked Sample Result	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Begult [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Analytes	[A]	Added [B]	[C]	%K [D]	E]	Result [F]	%K [G]	70	70K	70KFD	
Chloride		141	252	386	97	252	386	97	0	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.

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	Relinquišhet by:	f.	- U - U	Relinguished by:											LAB USE )	LAB #	-	Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:	<b>F</b>	Analysis Rec
	: Date: Time:	61/31/3	, Date: Time:	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	AH #4 (1-1.5')	AH #4 (0-1')	AH #3 (1-1.5')	AH #3 (0-1')	AH #2 (1-1.5')	AH #2 (0-1')	AH #1 (3-3.5')	AH #1 (2-2.5')	AH #1 (1-1.5')	AH #1 (0-1')		SAMPLE IDENTIFICATION			tory: Xenco	COG - Ike Taverez	Eddy Co, NM	White Fed 1H Flowline	COG	Tetra Tech, Inc.	2 129 of 3. Analysis Request of Chain of Custody Record
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	Date: Time:		の()な)(り (りちつ) Date: Time:	- Time	X X		X	X X	X X	X X	X X	X X	X X	×	WATER SOIL HCL HNO₃ ICE None		MATRIX PRESERVATIVE METHOD		Conner Moehring		212C-MD-01765		Mike Carmona	901W Wall Street, Ste 100 Midland, Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946	
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(Circle) HAND DELIVERED FEDEX UPS Tracking #:		orized		LAB USE REMARKS:		×	×		×	x				×	TPH TX1 TPH 801 PAH 827 Total Met TCLP Me TCLP Vol TCLP Ser RCI GC/MS V GC/MS V GC/MS S PCB's 800 NORM PLM (Asb Chloride General N Anion/Ca	005 ( 5M ( 0C als A tals A atiles mi Vo ol. 8: emi. ' 82 / ( estos Su Wate	(Ext to GRO - g As B Ag As E s s s latiles 260B / Vol. 8; s) s) ulfate r Cher	C35) DRO - C a Cd Cr I 3a Cd Cr I 624 270C/625 TDS mistry (se	DRO - I Pb Se I Pb Se	Hg Hg	st)		ANALYSIS REQUEST		RAA Page 1 of 5
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FEDEX UPS	Special Repor		Y BUSH: Same Dav	STANDARD											TCLP Vol TCLP Ser RCI GC/MS V GC/MS S PCB's 80	ni Vo ol. 8 emi. '	latiles 260B / Vol. 82		5				ANALYSIS REQUEST		92
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	ył Date: Time:	6/18		ruparty 6					AH #14 (1-1.5')	AH #14 (0-1')	AH #13 (2-2.5')	AH #13 (1-1.5')	AH #13 (0-1')			SAMPLE IDENTIFICATION			Xenco	COG - Ike Taverez		- Eddy Co, NM	White Fed 1H Flowline	COG	Tetra Tech, Inc.	33 of Analysis Request of Chain of Custody Record
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Ŷ	Date: Time:	21 61(8)(9		6/R/19/13					×	x	x	×	×	WA SO HC ICE Nor	L O3	2	MATRIX PRESERVATIVE METHOD		Conner Moehring			212C-MD-01765		Mike Carmona	901W Wall Street, Ste 100 Midland, Texas 79705 Tel (422) 682-4559 Fax (432) 682-3946	
(Circle) HAND	5930			1350 LAB USE					1 N	1 Z	1 Z	1 N	1 N	FIL ^T BTE TPH	TERE	5M (	RS /N) BTE (Ext to	X 8260 C35) DRO -		MRO)					-	6
HAND DELIVERED FEDEX UPS Tracking #:		Rush Charges Authorized	RUSH: Same Day 24 hr						X	X	×	×		TCL TCL RCI GC/ GC/ PCE NOF PLW Chlo	P Me P Vo P Se MS V MS S 3's 80 RM 1 (Ast pride	tals / latiles mi Vc 70l. 8 Semi. 082 /	Ag As E 3 260B / Vol. 82 608 s)	270C/62	r Pb S					ALYSIS REQUEST		JON WA Page
leased to 1	RRP Report	(	48 hr $\left(72 \text{ hr}\right)$	·	11.	25.2								Ger	on/Ca	Wate		TDS mistry (s ce	see att	ached	list	)				5 of 5

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## **XENCO** Laboratories



#### Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 06/19/2019 11:40:00 AM Temperature Measuring device used : R8 Work Order #: 628192 Comments Sample Receipt Checklist .3 #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)? N/A #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: Biuma Teel

Date: 06/19/2019

Checklist reviewed by: Jession Vramer

Jessica Kramer

Date: 06/19/2019



Project Id:	212C-MD-01765
Contact:	Mike Carmona
Project Location:	Eddy Co, NM

Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

Date Received in Lab:Wed Feb-12-20 01:15 pmReport Date:18-FEB-20Project Manager:Jessica Kramer

	Lab Id:	652161-00	01	652161-0	02	652161-0	03	652161-0	04	652161-0	05	652161-00	)6
Analysis Requested	Field Id:	AH #1 (0-	1')	AH #1 (1-1	.5')	AH #1 (2-2	5')	AH #1 (2.5	-3')	AH #2 (0-	-1')	AH #2 (1-1	.5')
Analysis Kequesiea	Depth:	0-1 ft		1-1.5 ft		2-2.5 ft		2.5-3 ft		0-1 ft		1-1.5 ft	
	Matrix:	SOIL		SOIL									
	Sampled:	Feb-12-200	0:00	Feb-12-200	0:00								
Chloride by EPA 300	Extracted:	Feb-12-20 1	7:31	Feb-12-20 17	7:31								
	Analyzed:	Feb-12-20 1	9:28	Feb-12-20 1	9:34	Feb-12-20 1	9:41	Feb-12-20 2	0:00	Feb-12-20 2	0:06	Feb-12-20 20	0:13
	Units/RL:	mg/kg	RL	mg/kg	RL								
Chloride		1630	49.9	16.1	10.0	2310	50.4	4940	50.0	2130	49.6	722	9.96

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Jessica Kramer Project Assistant

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Project Id:	212C-MD-01765
Contact:	Mike Carmona
Project Location:	Eddy Co, NM

Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

Date Received in Lab:Wed Feb-12-20 01:15 pmReport Date:18-FEB-20Project Manager:Jessica Kramer

	Lab Id:	652161-0	)7	652161-0	08	652161-0	09	652161-0	10	652161-0	11	652161-01	12
Analysis Requested	Field Id:	AH #2 (2-2	AH #2 (2-2.5')		AH #3 (0-1')		AH #3 (1-1.5')		1')	AH #4 (1-1	1.5')	AH #4 (2-2.5	
Analysis Kequesied	Depth:	2-2.5 ft	2-2.5 ft		0-1 ft		1-1.5 ft		0-1 ft			2-2.5 ft	
	Matrix:	SOIL	SOIL			SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-12-200	Feb-12-20 00:00		Feb-12-20 00:00		0:00	Feb-12-20 0	0:00	Feb-12-20 00:00		Feb-12-20 00	0:00
Chloride by EPA 300	Extracted:	Feb-12-20 1	7:31	Feb-12-20 1	7:31	Feb-12-20 1	7:31	Feb-12-20 1	7:31	Feb-12-20 1	7:31	Feb-12-20 17	7:31
	Analyzed:	Feb-12-20 2	0:19	Feb-12-20 2	0:26	Feb-12-20 2	0:45	Feb-12-20 20	0:51	Feb-12-20 2	1:11	Feb-12-20 21	1:17
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		692	9.98	25.8	9.98	25.2	10.0	2940	50.4	1680	49.6	814	9.98

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Jessica Kramer Project Assistant

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Project Id:	212C-MD-01765
Contact:	Mike Carmona
Project Location:	Eddy Co, NM

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Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

Date Received in Lab:Wed Feb-12-20 01:15 pmReport Date:18-FEB-20Project Manager:Jessica Kramer

	Lab Id:	652161-0	13	652161-0	652161-014		652161-015		6	652161-0	17	652161-01	18
Analysis Requested	Field Id:	AH #4 (3-3	AH #4 (3-3.5')		AH #5 (0-1')		AH #5 (1-1.5')		AH #5 (2-2.5')		3.5')	AH #6 (0-	1')
Analysis Kequesied	Depth:	3-3.5 ft		0-1 ft		1-1.5 ft		2-2.5 ft		3-3.5 ft		0-1 ft	
	Matrix:	SOIL	SOIL			SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-12-200	Feb-12-20 00:00		Feb-12-20 00:00		0:00	Feb-12-20 00	):00	Feb-12-200	0:00	Feb-12-20 0	0:00
Chloride by EPA 300	Extracted:	Feb-12-20 1	7:31	Feb-12-20 17	7:31	Feb-12-20 1	7:31	Feb-12-20 17	7:31	Feb-12-20 1	7:31	Feb-13-20 1	3:44
	Analyzed:	Feb-12-20 2	1:23	Feb-12-20 2	1:30	Feb-12-202	1:36	Feb-12-20 21	:43	Feb-12-20 2	1:49	Feb-13-20 10	6:46
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		307	9.96	<9.98	9.98	<9.92	9.92	<9.96	9.96	10.5	9.98	29.4	10.0

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Jessica Kramer Project Assistant



Project Id:	212C-MD-01765
Contact:	Mike Carmona
Project Location:	Eddy Co, NM

Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

Date Received in Lab:Wed Feb-12-20 01:15 pmReport Date:18-FEB-20Project Manager:Jessica Kramer

	Lab Id:	652161-0	19	652161-0	20	652161-02	21	652161-02	22	652161-0	23	652161-02	24
Analysis Requested	Field Id:	AH #6 (1-1	AH #6 (1-1.5')		AH #6 (2-2.5')		AH #6 (3-3.5')		AH #6 (4-4.5')		·1')	AH #7 (1-1	.5')
Analysis Kequesiea	Depth:	1-1.5 ft		2-2.5 ft		3-3.5 ft		4-4.5 ft		0-1 ft		1-1.5 ft	
	Matrix:	SOIL	SOIL			SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-12-200	Feb-12-20 00:00		Feb-12-20 00:00		0:00	Feb-12-200	0:00	Feb-12-20 00:00		Feb-12-20 0	0:00
Chloride by EPA 300	Extracted:	Feb-13-201	3:44	Feb-13-20 1	3:44	Feb-13-20 1	3:44	Feb-13-20 1	3:44	Feb-13-20 1	3:44	Feb-13-20 1	3:44
	Analyzed:	Feb-13-20 1	Feb-13-20 16:52		6:57	Feb-13-201	7:03	Feb-13-201	7:09	Feb-13-20 1	7:27	Feb-13-2017	7:33
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		14.9	9.96	28.7	10.0	22.3	10.1	24.7	10.1	10.7	9.98	17.7	10.0

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Jessica Kramer Project Assistant

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Project Id:	212C-MD-01765
Contact:	Mike Carmona
Project Location:	Eddy Co, NM

Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

Date Received in Lab:Wed Feb-12-20 01:15 pmReport Date:18-FEB-20Project Manager:Jessica Kramer

	Lab Id:	652161-02	25	652161-02	652161-026		652161-027		28	652161-0	29	652161-03	30
Analysis Requested	Field Id:	AH #7 (2-2	AH #7 (2-2.5')		AH #8 (0-1')		AH #8 (1-1.5')		AH #8 (2-2.5')		3.5')	AH #8 (4-4.5	
Analysis Kequestea	Depth:	2-2.5 ft	2-2.5 ft		0-1 ft		1-1.5 ft		2-2.5 ft			4-4.5 ft	
	Matrix:	SOIL	SOIL			SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-12-200	Feb-12-20 00:00		Feb-12-20 00:00		0:00	Feb-12-20 0	0:00	Feb-12-20 00:00		Feb-12-200	0:00
Chloride by EPA 300	Extracted:	Feb-13-20 1	3:44	Feb-13-20 1	3:44	Feb-13-20 13	3:44	Feb-13-20 13	3:44	Feb-13-20 1	3:44	Feb-13-20 1	3:44
	Analyzed:	Feb-13-20 1	Feb-13-20 17:39		7:57	Feb-13-20 18	8:03	Feb-13-20 18	8:09	Feb-13-20 1	8:15	Feb-13-201	8:21
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<10.1	10.1	<10.1	10.1	<10.1	10.1	<9.94	9.94	14.8	9.98	41.4	9.96

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Jessica Kramer Project Assistant

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Project Id:	212C-MD-01765
Contact:	Mike Carmona
Project Location:	Eddy Co, NM

Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

Date Received in Lab:Wed Feb-12-20 01:15 pmReport Date:18-FEB-20Project Manager:Jessica Kramer

	Lab Id:	652161-03	31	652161-03	32	652161-03	33	652161-03	34	652161-0	35	652161-03	36
Analysis Requested	Field Id:	AH #9 (0-	1')	AH #9 (1-1	AH #9 (1-1.5')		AH #9 (2-2.5')		.5')	AH #10 (0-1')		AH #10 (1-1	1.5')
Analysis Kequesieu	Depth:	0-1 ft		1-1.5 ft	1-1.5 ft		2-2.5 ft		3-3.5 ft			1-1.5 ft	
	Matrix:	SOIL	SOIL			SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-12-20 0	Feb-12-20 00:00		Feb-12-20 00:00		0:00	Feb-12-20 0	0:00	Feb-12-20 00:00		Feb-12-20 0	0:00
Chloride by EPA 300	Extracted:	Feb-13-20 1	3:44	Feb-13-20 1	5:00	Feb-13-20 1	5:00	Feb-13-20 1	5:00	Feb-13-20 1	5:00	Feb-13-20 1	5:00
	Analyzed:	Feb-13-20 1	Feb-13-20 18:27		9:04	Feb-13-20 1	9:23	Feb-13-20 19	9:30	Feb-13-20 1	9:36	Feb-13-20 19	9:42
	Units/RL:	mg/kg	mg/kg RL		RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<9.98	9.98	<10.0	10.0	10.9	10.1	12.6	10.0	28.1	9.98	19.0	9.94

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Project Id:	212C-MD-01765
Contact:	Mike Carmona
Project Location:	Eddy Co, NM

Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

Date Received in Lab:Wed Feb-12-20 01:15 pmReport Date:18-FEB-20Project Manager:Jessica Kramer

	Lab Id:	652161-03	37	652161-03	38	652161-03	39	652161-04	0	652161-0	41	652161-04	42
Analysis Requested	Field Id:	AH #10 (2-2	AH #10 (2-2.5')		AH #11 (0-1')		AH #11 (1-1.5')		2.5')	AH #11 (3-	3.5')	AH #12 (0-	-1')
Analysis Kequesied	Depth:	2-2.5 ft		0-1 ft	0-1 ft		1-1.5 ft		2-2.5 ft			0-1 ft	
	Matrix:	SOIL	SOIL			SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-12-20 0	Feb-12-20 00:00		Feb-12-20 00:00		Feb-12-20 00:00		):00	Feb-12-20 00:00		Feb-12-20 00	0:00
Chloride by EPA 300	Extracted:	Feb-13-20 1	5:00	Feb-13-20 1	5:00	Feb-13-20 1	5:00	Feb-13-20 1	5:00	Feb-13-20 1	5:00	Feb-13-20 15	5:00
	Analyzed:	Feb-13-20 2	0:02	Feb-13-20 20	0:08	Feb-13-20 20	0:14	Feb-13-20 20	):21	Feb-13-20 2	0:27	Feb-13-20 20	0:34
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<9.98	9.98	<10.0	10.0	<10.1	10.1	<9.88	9.88	15.4	9.88	<9.94	9.94

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Jessica Kramer Project Assistant

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Project Id:	212C-MD-01765					
Contact:	Mike Carmona					
Project Location:	Eddy Co, NM					

Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

Date Received in Lab:Wed Feb-12-20 01:15 pmReport Date:18-FEB-20Project Manager:Jessica Kramer

	Lab Id:	652161-043		652161-044		652161-045		652161-046		652161-047		
Analysis Requested	Field Id:	AH #12 (1-1.5')		AH #12 (2-2	2.5')	AH #13 (0-1')		AH #13 (1-1.5')		AH #14 (0-1')		
	Depth:	1-1.5 ft		2-2.5 ft		0-1 ft		1-1.5 ft		0-1 ft		
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	Feb-12-20 00:00		Feb-12-20 00:00		Feb-12-20 00:00		Feb-12-20 00:00		Feb-12-20 00:00		
Chloride by EPA 300	Extracted:	Feb-13-20 15:00		Feb-13-20 15:00		Feb-13-20 15:00		Feb-13-20 15:00		Feb-13-20 15:00		
	Analyzed:	Feb-13-20 20:53		Feb-13-20 21:12		Feb-13-20 21:18		Feb-13-20 21:25		Feb-13-20 21:31		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		12.4	9.96	10.3	10.1	<10.0	10.0	<9.94	9.94	<10.0	10.0	

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Jessica Kramer Project Assistant

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# Analytical Report 652161

for Tetra Tech- Midland

Project Manager: Mike Carmona

White Federal 1H Flowline (5.13.19)

#### 212C-MD-01765

#### 18-FEB-20

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483) Received by OCD: 5/14/2021 10:15:53 AM





18-FEB-20

Project Manager: **Mike Carmona Tetra Tech- Midland** 901 West Wall ST Midland, TX 79701

#### Reference: XENCO Report No(s): **652161 White Federal 1H Flowline** (5.13.19) Project Address: Eddy Co, NM

#### Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 652161. 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. 652161 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,

Jession Vermer

Jessica Kramer Project Assistant

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#### Sample Id

AH #1 (0-1')
AH #1 (1-1.5')
AH #1 (2-2.5')
AH #1 (2.5-3')
AH #2 (0-1')
AH #2 (1-1.5')
AH #2 (2-2.5')
AH #3 (0-1')
AH #3 (1-1.5')
AH #4 (0-1')
AH #4 (1-1.5')
AH #4 (2-2.5')
AH #4 (3-3.5')
AH #5 (0-1')
AH #5 (1-1.5')
AH #5 (2-2.5')
AH #5 (3-3.5')
AH #6 (0-1')
AH #6 (1-1.5')
AH #6 (2-2.5')
AH #6 (3-3.5')
AH #6 (4-4.5')
AH #7 (0-1')
AH #7 (1-1.5')
AH #7 (2-2.5')
AH #8 (0-1')
AH #8 (1-1.5')
AH #8 (2-2.5')
AH #8 (3-3.5')
AH #8 (4-4.5')
AH #9 (0-1')
AH #9 (1-1.5')
AH #9 (2-2.5')
AH #9 (3-3.5')
AH #10 (0-1')
AH #10 (1-1.5')
AH #10 (2-2.5')
AH #11 (0-1')
AH #11 (1-1.5')
AH #11 (2-2.5')
AH #11 (3-3.5')
AH #12 (0-1')

# Sample Cross Reference 652161

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#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	02-12-20 00:00	0 - 1 ft	652161-001
S	02-12-20 00:00	1 - 1.5 ft	652161-002
S	02-12-20 00:00	2 - 2.5 ft	652161-003
S	02-12-20 00:00	2.5 - 3 ft	652161-004
S	02-12-20 00:00	0 - 1 ft	652161-005
S	02-12-20 00:00	1 - 1.5 ft	652161-006
S	02-12-20 00:00	2 - 2.5 ft	652161-007
S	02-12-20 00:00	0 - 1 ft	652161-008
S	02-12-20 00:00	1 - 1.5 ft	652161-009
S	02-12-20 00:00	0 - 1 ft	652161-010
S	02-12-20 00:00	1 - 1.5 ft	652161-011
S	02-12-20 00:00	2 - 2.5 ft	652161-012
S	02-12-20 00:00	3 - 3.5 ft	652161-013
S	02-12-20 00:00	0 - 1 ft	652161-014
S	02-12-20 00:00	1 - 1.5 ft	652161-015
S	02-12-20 00:00	2 - 2.5 ft	652161-016
S	02-12-20 00:00	3 - 3.5 ft	652161-017
S	02-12-20 00:00	0 - 1 ft	652161-018
S	02-12-20 00:00	1 - 1.5 ft	652161-019
S	02-12-20 00:00	2 - 2.5 ft	652161-020
S	02-12-20 00:00	3 - 3.5 ft	652161-021
S	02-12-20 00:00	4 - 4.5 ft	652161-022
S	02-12-20 00:00	0 - 1 ft	652161-023
S	02-12-20 00:00	1 - 1.5 ft	652161-024
S	02-12-20 00:00	2 - 2.5 ft	652161-025
S	02-12-20 00:00	0 - 1 ft	652161-026
S	02-12-20 00:00	1 - 1.5 ft	652161-027
S	02-12-20 00:00	2 - 2.5 ft	652161-028
S	02-12-20 00:00	3 - 3.5 ft	652161-029
S	02-12-20 00:00	4 - 4.5 ft	652161-030
S	02-12-20 00:00	0 - 1 ft	652161-031
S	02-12-20 00:00	1 - 1.5 ft	652161-032
S	02-12-20 00:00	2 - 2.5 ft	652161-033
S	02-12-20 00:00	3 - 3.5 ft	652161-034
S	02-12-20 00:00	0 - 1 ft	652161-035
S	02-12-20 00:00	1 - 1.5 ft	652161-036
S	02-12-20 00:00	2 - 2.5 ft	652161-037
S	02-12-20 00:00	0 - 1 ft	652161-038
S	02-12-20 00:00	1 - 1.5 ft	652161-039
S	02-12-20 00:00	2 - 2.5 ft	652161-040
S	02-12-20 00:00	3 - 3.5 ft	652161-041
S	02-12-20 00:00	0 - 1 ft	652161-042
S	02-12-20 00:00	1 - 1.5 ft	652161-043

AH #12 (1-1.5')



AH #12 (2-2.5') AH #13 (0-1') AH #13 (1-1.5') AH #14 (0-1')

# Sample Cross Reference 652161

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

S	02-12-20 00:00	2 - 2.5 ft	652161-044
S	02-12-20 00:00	0 - 1 ft	652161-045
S	02-12-20 00:00	1 - 1.5 ft	652161-046
S	02-12-20 00:00	0 - 1 ft	652161-047





### CASE NARRATIVE

Client Name: Tetra Tech- Midland Project Name: White Federal 1H Flowline (5.13.19)

Project ID: 212C-MD-01765 Work Order Number(s): 652161 
 Report Date:
 18-FEB-20

 Date Received:
 02/12/2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Chloride		16887-00-6	1630	49.9	mg/kg	02.12.20 19.28		5
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Seq Number:	3116368							
Analyst:	MAB		Date Prep:	02.12.20 17.31	]	Basis: We	t Weight	
Tech:	MAB				0	% Moisture:		
Analytical Me	ethod: Chloride by EPA	A 300			]	Prep Method: E30	OP	
1	d: 652161-001			cted: 02.12.20 00.00	\$	Sample Depth:0 - 1 ft		
Sample Id:	AH #1 (0-1')		Matrix:	Soil	1	Date Received:02.1	12.20 13.15	





### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample Id	<b>AH #1 (1-1.5')</b> d: 652161-002		Matrix: Date Collec	Soil cted: 02.12.20 00.00		Date Received:02.12.20 13. Sample Depth:1 - 1.5 ft		
Analytical Me	thod: Chloride by EPA	300				Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	02.12.20 17.31		Basis:	Wet Weight	
Seq Number:	3116368							
Parameter		Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil

Chloride

16887-00-6 **16.1** 

10.0

mg/kg 02.12.20 19.34





### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

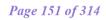
Sample Id: Lab Sample Id	<b>AH #1 (2-2.5')</b> d: 652161-003		Matrix: Date Colle	Soil cted: 02.12.20 00.00		Date Received:02.12.20 13. Sample Depth:2 - 2.5 ft		
Analytical Me	thod: Chloride by EPA	300				Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	02.12.20 17.31		Basis:	Wet Weight	
Seq Number:	3116368							
Parameter		Cas Number	Result	RL	Units	Analysis Da	ite Flag	Dil

Chloride

16887-00-6 2310

50.4

mg/kg 02.12.20 19.41





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample I	<b>AH #1 (2.5-3')</b> d: 652161-004		Matrix: Date Colle	Soil ected: 02.12.20 00.00		Date Received:02.12.20 13.15 Sample Depth:2.5 - 3 ft		
Analytical Me Tech:	ethod: Chloride by EPA MAB	A 300				Prep Method: E30 % Moisture:	00P	
Analyst: Seq Number:	MAB 3116368		Date Prep:	02.12.20 17.31	]	Basis: We	t Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	4940	50.0	mg/kg	02.12.20 20.00		5



### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample Id:	<b>AH #2 (0-1')</b> 652161-005		Matrix:SoilDate ReceivedDate Collected:02.12.20 00.00Sample Depth			1:02.12.20 13.15 :0 - 1 ft		
5	od: Chloride by EPA 3	300				Prep Method:	E300P	
100111	MAB MAB		Date Prep:	02.12.20 17.31		% Moisture: Basis:	Wet Weight	
Seq Number: 3			Date Trep.	02.12.20 17.31		Dusis.	wet weight	
Parameter		Cas Number	Result	RL	Units	Analysis Da	ite Flag	Dil

16887-00-6 2130

49.6

mg/kg 02.12.20 20.06



### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #2 (1-1.5') Lab Sample Id: 652161-006		Matrix: Date Collecte	Soil d: 02.12.20 00.00		Date Received:02.12.20 13.15 Sample Depth:1 - 1.5 ft		
Analytical Method: Chloride by EPA Tech: MAB	300				Prep Method: % Moisture:	E300P	
Analyst: MAB Seq Number: 3116368		Date Prep:	02.12.20 17.31		Basis:	Wet Weight	t
Parameter	Cas Number	Result R	RL	Units	Analysis Da	ate Flag	Dil

Chloride

16887-00-6 722

9.96

02.12.20 20.13

mg/kg





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	AH #2 (2-2.5')		Matrix:	Soil	1	Date Received:02.12.20 13.15			
Lab Sample I	d: 652161-007		Date Colle	cted: 02.12.20 00.00	0.00 Sample Depth:2 - 2.5 ft				
Analytical Me	ethod: Chloride by EPA	A 300			I	Prep Method: E30	00P		
Tech:	MAB				Ģ	% Moisture:			
Analyst:	MAB		Date Prep:	02.12.20 17.31	1	Basis: We	t Weight		
Seq Number:	3116368								
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Chloride		16887-00-6	692	9.98	mg/kg	02.12.20 20.19		1	



### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: A Lab Sample Id: 6	<b>AH #3 (0-1')</b> 652161-008		Matrix: Date Collec	Matrix: Soil Date Collected: 02.12.20 00.00			Date Received:02.12.20 13.15 Sample Depth:0 - 1 ft			
Analytical Metho	od: Chloride by EPA 3	800			I	Prep Method:	E300P			
Tech: M	MAB				Ģ	% Moisture:				
Analyst: N	MAB		Date Prep:	02.12.20 17.31	1	Basis:	Wet Weight			
Seq Number: 3	3116368									
Parameter		Cas Number	Result	RL	Units	Analysis Da	ite Flag	Dil		

Chloride

25.8

16887-00-6

9.98

02.12.20 20.26

mg/kg





### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample Id	<b>AH #3 (1-1.5')</b> d: 652161-009		Matrix: Date Collec	Soil cted: 02.12.20 00.00		Date Received:02.12.20 13.1 Sample Depth:1 - 1.5 ft		
Analytical Me	thod: Chloride by EPA	300				Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	02.12.20 17.31		Basis:	Wet Weight	
Seq Number:	3116368							
Parameter		Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil

Chloride

25.2

16887-00-6

10.0

02.12.20 20.45

mg/kg



### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Chloride		16887-00-6	2940	50.4	mg/kg	02.12.20 20.51		5
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Seq Number:	3116368							
Analyst:	MAB		Date Prep	: 02.12.20 17.31	1	Basis: We	t Weight	
Tech:	MAB				Ģ	% Moisture:		
Analytical Me	ethod: Chloride by EPA	A 300			I	Prep Method: E30	00P	
Lab Sample I	d: 652161-010		Date Colle	ected: 02.12.20 00.00	c.	Sample Depth:0 -	1 ft	
Sample Id:	1			Soil	Date Received:02.12.20 13.15			





### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Sample Id: AH #4 (1-1.5') Lab Sample Id: 652161-011			Soil cted: 02.12.20 00.00	Date Received:02.12.20 13.15 Sample Depth: 1 - 1.5 ft			
ľ	ethod: Chloride by EPA	300	Date Colle	cled: 02.12.20 00.00		Prep Method: E30		
Tech:	MAB				Ģ	% Moisture:		
Analyst:	MAB		Date Prep:	02.12.20 17.31	1	Basis: We	t Weight	
Seq Number:	3116368							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	1680	49.6	mg/kg	02.12.20 21.11		5

49.6





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

1	Sample Id: AH #4 (2-2.5') Lab Sample Id: 652161-012			Matrix: Soil Date Collected: 02.12.20 00.00			Date Received:02.12.20 13.15 Sample Depth:2 - 2.5 ft			
5	od: Chloride by EPA 3 IAB	00				Prep Method: % Moisture:	E300P			
Analyst: M	IAB		Date Prep:	02.12.20 17.31		Basis:	Wet Weight			
Seq Number: 31	116368									
Parameter		Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil		

Chloride

16887-00-6 814

9.98

mg/kg 02.12.20 21.17





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Chloride		16887-00-6	307	9.96	mg/kg	02.12.20 21.23		1	
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Seq Number:	3116368								
Analyst:	MAB		Date Prep:	02.12.20 17.31		Basis: We	et Weight		
Tech:	MAB					% Moisture:			
Analytical Me	ethod: Chloride by EPA	A 300				Prep Method: E30	90P		
Lab Sample I	d: 652161-013		Date Colle	cted: 02.12.20 00.00		Sample Depth:3 -	3.5 ft		
Sample Id:	AH #4 (3-3.5')		Matrix:	Soil	Date Received:02.12.20 13.15				



### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #5 (0-1') Lab Sample Id: 652161-014		Matrix: Soil Date Collected: 02.12.20 00.00			Date Received:02.12.20 13.15 Sample Depth:0 - 1 ft			
Analytical Method: Chloride by EPA Tech: MAB	300				Prep Method: % Moisture:	E300P		
Analyst: MAB Seq Number: 3116368		Date Prep:	02.12.20 17.31		Basis:	Wet Weight		
Parameter	Cas Number	Result F	RL	Units	Analysis Da	ate Flag	Dil	

<9.98

16887-00-6

9.98

mg/kg

02.12.20 21.30

U



### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: <b>AH #5 (1-1.5')</b> Lab Sample Id: 652161-015		Matrix: Soil Date Collected: 02.12.20 00.00			Date Received:02.12.20 13.15 Sample Depth:1 - 1.5 ft			
Analytical Method: Chloride by EPA 3 Tech: MAB	300				Prep Method: % Moisture:	E300P		
Analyst: MAB Seq Number: 3116368		Date Prep:	02.12.20 17.31		Basis:	Wet Weight		
Parameter	Cas Number	Result R	L	Units	Analysis Da	ate Flag	Dil	

<9.92

16887-00-6

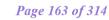
9.92

02.12.20 21.36

U

1

mg/kg





### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #5 Lab Sample Id: 652161	· · · · ·	Matrix: Date Collecte	Soil ed: 02.12.20 00.00	Date Received:02.12.20 13.15 Sample Depth:2 - 2.5 ft			
Analytical Method: Ch Tech: MAB	loride by EPA 300				rep Method: E3	00P	
Analyst: MAB Seq Number: 3116368		Date Prep:	02.12.20 17.31	В	Basis: We	et Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil

16887-00-6

<9.96 9.96 mg/kg

02.12.20 21.43

U





### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #5 (3-3.5') Lab Sample Id: 652161-017			Matrix: Soil Date Collected: 02.12.20 00.00			Date Received:02.12.20 13.15 Sample Depth:3 - 3.5 ft			
Analytical Me Tech:	thod: Chloride by EPA 3 MAB	300				Prep Method: % Moisture:	E300P		
Analyst:	MAB		Date Prep:	02.12.20 17.31		Basis:	Wet Weight		
Seq Number:	3116368								
Parameter		Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil	

Chloride

16887-00-6 **10.5** 

9.98

mg/kg 02.12.20 21.49



### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: <b>AH #6 (0-1'</b> ) Lab Sample Id: 652161-018			Matrix: Date Collec	Soil cted: 02.12.20 00.00	Date Received:02.12.20 13.15 Sample Depth:0 - 1 ft			
Analytical Me Tech:	thod: Chloride by EPA 3 MAB	300				Prep Method: % Moisture:	E300P	
Analyst: Seq Number:	MAB 3116482		Date Prep:	02.13.20 13.44		Basis:	Wet Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil

Chloride

16887-00-6 **29.4** 

10.0

mg/kg 02.13.20 16.46





### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample I	<b>AH #6 (1-1.5')</b> Id: 652161-019		Matrix: Date Colle	Soil cted: 02.12.20 00.00		Date Received:02.1 Sample Depth:1 -		5
Analytical M	ethod: Chloride by EPA	<b>A</b> 300			I	Prep Method: E30	OP	
Tech:	MAB				Ģ	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 13.44	I	Basis: We	t Weight	
Seq Number:	3116482							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	14.9	9.96	mg/kg	02.13.20 16.52		1

9.96





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Sample Id: AH #6 (2-2.5') Lab Sample Id: 652161-020			Soil		Date Received:02.1		
Lab Sample I	d: 652161-020		Date Colle	cted: 02.12.20 00.00		Sample Depth:2 - 2	2.5 ft	
Analytical Me	ethod: Chloride by EPA	A 300			]	Prep Method: E30	0P	
Tech:	MAB				(	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 13.44	]	Basis: We	t Weight	
Seq Number:	3116482							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	28.7	10.0	mg/kg	02.13.20 16.57		1





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Sample Id: <b>AH #6 (3-3.5'</b> ) Lab Sample Id: 652161-021			Soil	Date Received:02.12.20 13.15			
1			Date Colle	cted: 02.12.20 00.00		Sample Depth:3 - 1		
Analytical Me	ethod: Chloride by EPA	A 300			]	Prep Method: E30	0P	
Tech:	MAB				Ģ	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 13.44	1	Basis: We	t Weight	
Seq Number:	3116482							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	22.3	10.1	mg/kg	02.13.20 17.03		1





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	AH #6 (4-4.5')		Matrix:	Soil	Date Received:02.12.20 13.15			
Lab Sample I	d: 652161-022		Date Colle	cted: 02.12.20 00.00	2	Sample Depth:4 -	4.5 ft	
Analytical Me	ethod: Chloride by EPA	A 300			]	Prep Method: E30	00P	
Tech:					0	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 13.44	]	Basis: We	t Weight	
Seq Number:	3116482							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	24.7	10.1	mg/kg	02.13.20 17.09		1



# **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample Id	Sample Id: AH #7 (0-1') Lab Sample Id: 652161-023			Soil cted: 02.12.20 00.00	Date Received:02.12.20 13.15 Sample Depth:0 - 1 ft			
Analytical Met Tech:	thod: Chloride by EPA 3 MAB	300				Prep Method: % Moisture:	E300P	
Analyst: Seq Number:	MAB 3116482		Date Prep:	02.13.20 13.44		Basis:	Wet Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil

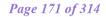
Chloride

16887-00-6 10.7

9.98

02.13.20 17.27

mg/kg





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Sample Id: AH #7 (1-1.5') Lab Sample Id: 652161-024			Soil	Date Received:02.12.20 13.15			
Lab Sample I	d: 652161-024		Date Colle	cted: 02.12.20 00.00		Sample Depth:1 -	1.5 ft	
Analytical Me	ethod: Chloride by EPA	A 300			I	Prep Method: E30	)0P	
Tech:					ç	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 13.44	Basis: Wet Weight			
Seq Number:	3116482							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	17.7	10.0	mg/kg	02.13.20 17.33		1





### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #7 (2-2.5') Lab Sample Id: 652161-025			Matrix: Soil Date Collected: 02.12.20 00.00			Date Received:02.12.20 13.15 Sample Depth:2 - 2.5 ft			
Analytical Met Tech:	hod: Chloride by EPA 3 MAB	300				Prep Method: % Moisture:	E300P		
Analyst:	MAB		Date Prep:	02.13.20 13.44	]	Basis:	Wet Weight		
Seq Number:	3116482								
Parameter		Cas Number	Result	RL	Units	Analysis Dat	te Flag	Dil	

16887-00-6 <10.1

10.1

mg/kg 02.13.20

02.13.20 17.39 U



# **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #8 (0-1') Lab Sample Id: 652161-026			Matrix: Date Collec	atrix: Soil ate Collected: 02.12.20 00.00			Date Received:02.12.20 13.15 Sample Depth:0 - 1 ft		
Analytical Me	thod: Chloride by EPA	300			]	Prep Method:	E300P		
Tech:	MAB				0	% Moisture:			
Analyst:	MAB		Date Prep:	02.13.20 13.44	]	Basis:	Wet Wei	ght	
Seq Number:	3116482								
Parameter		Cas Number	Result	RL	Units	Analysis Da	ite Fla	ag Dil	

16887-00-6 <10.1

10.1

mg/kg 02.13

02.13.20 17.57 U





### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	AH #8 (1-1.5')		Matrix:	Soil		Date Received	1:02.12.20 13.15	
Lab Sample I	d: 652161-027		Date Collec	ted: 02.12.20 00.00	Sample Depth: 1 - 1.5 ft			
Analytical Me	thod: Chloride by EPA	300				Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 13.44		Basis:	Wet Weight	
Seq Number:	3116482							
Parameter		Cas Number	Result	RL	Units	Analysis Da	nte Flag	Dil

<10.1 16887-00-6

10.1

02.13.20 18.03

U

1

mg/kg





#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #8 (2-2.5') Lab Sample Id: 652161-028			Matrix: Date Collec	Date Received:02.12.20 13.15 Sample Depth:2 - 2.5 ft				
Analytical Me Tech:	thod: Chloride by EPA 3	300				Prep Method: % Moisture:	E300P	
Analyst: Seq Number:	MAB		Date Prep:	02.13.20 13.44		Basis:	Wet Weight	
Parameter	5110102	Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil

<9.94

16887-00-6

9.94

mg/kg

02.13.20 18.09

U





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample I	<b>AH #8 (3-3.5')</b> d: 652161-029		Matrix: Date Colle	Soil cted: 02.12.20 00.00	Date Received:02.12.20 13.1 20 00.00 Sample Depth:3 - 3.5 ft			
2	ethod: Chloride by EP	A 300				Prep Method: E30	00P	
Tech: Analyst:	MAB MAB		Date Prep:	02.13.20 13.44		% Moisture: Basis: We	t Weight	
Seq Number:	3116482							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	14.8	9.98	mg/kg	02.13.20 18.15		1





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample I	<b>AH #8 (4-4.5')</b> d: 652161-030		Matrix: Date Colle	Soil cted: 02.12.20 00.00	Date Received:02.12.20 13.15           .00         Sample Depth:4 - 4.5 ft			
2	ethod: Chloride by EPA MAB	A 300			I	Prep Method: E30 % Moisture:		
Tech: Analyst: Seq Number:	MAB		Date Prep:	02.13.20 13.44			t Weight	
Parameter	5110482	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	41.4	9.96	mg/kg	02.13.20 18.21		1



### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #9 (0-1') Lab Sample Id: 652161-031		Matrix: Date Collecte	Date Received:02.12.20 13.15 Sample Depth:0 - 1 ft				
Analytical Method: Chloride by l	EPA 300				rep Method: I	E300P	
Tech: MAB				%	6 Moisture:		
Analyst: MAB		Date Prep:	02.13.20 13.44	В	Basis: V	Wet Weight	
Seq Number: 3116482							
Parameter	Cas Number	Result F	RL	Units	Analysis Date	e Flag	Dil

<9.98

16887-00-6

9.98

mg/kg

02.13.20 18.27

U





### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #9 (1-1.5') Lab Sample Id: 652161-032		Matrix: Date Collec	Soil ted: 02.12.20 00.00		eived:02.12.20 13.1 Depth:1 - 1.5 ft	5
Analytical Method: Chloride by EP Tech: MAB	A 300			Prep Meth % Moistu	hod: E300P re:	
Analyst: MAB Seq Number: 3116483		Date Prep:	02.13.20 15.00	Basis:	Wet Weight	
Parameter	Cas Number	Result	RL	Units Analys	sis Date Flag	Dil

16887-00-6

<10.0 10.0

mg/kg 02.13.20 19.04

U





### **Certificate of Analytical Results 652161**

### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Sample Id: AH #9 (2-2.5') Lab Sample Id: 652161-033			Soil	1	Date Received:02.	12.20 13.15	5
Lab Sample I	d: 652161-033		Date Colle	cted: 02.12.20 00.00	2	Sample Depth:2 -	2.5 ft	
Analytical Me	ethod: Chloride by EPA	A 300			I	Prep Method: E30	OP	
Tech:					Ģ	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 15.00	1	Basis: We	t Weight	
Seq Number:	3116483							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	10.9	10.1	mg/kg	02.13.20 19.23		1





### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Sample Id: AH #9 (3-3.5') Lab Sample Id: 652161-034			Soil	1	Date Received:02.1	12.20 13.15	5
Lab Sample I	d: 652161-034		Date Colle	cted: 02.12.20 00.00	2	Sample Depth: 3 -	3.5 ft	
Analytical Me	ethod: Chloride by EPA	A 300			I	Prep Method: E30	OP	
Tech:	MAB				Ģ	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 15.00	1	Basis: We	t Weight	
Seq Number:	3116483							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	12.6	10.0	mg/kg	02.13.20 19.30		1

Released to Imaging: 7/22/2021 11:35:28 AM



# **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: <b>AH #10 (0-1</b> Lab Sample Id: 652161-035	))	Matrix: Date Collec	Soil eted: 02.12.20 00.00	Date Received:02.12.20 13.15 Sample Depth:0 - 1 ft			
Analytical Method: Chloride Tech: MAB	e by EPA 300			Prep Met % Moista	thod: E300P ure:		
Analyst: MAB		Date Prep:	02.13.20 15.00	Basis:	Wet Weight		
Seq Number: 3116483							
Parameter	Cas Number	Result	RL	Units Analy	rsis Date Flag	Dil	

16887-00-6 **28.1** 

9.98

mg/kg 02.13.20 19.36

1





### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Sample Id: <b>AH #10 (1-1.5')</b> Lab Sample Id: 652161-036			Soil cted: 02.12.20 00.00	Date Received:02.12.20 13.15 Sample Depth: 1 - 1.5 ft				
-	ethod: Chloride by EPA	× 300	Date Colle	cted: 02.12.20 00.00		Prep Method: E30			
Tech:	MAB	1 500				% Moisture:			
Analyst: Seq Number:	MAB 3116483		Date Prep:	02.13.20 15.00	]	Basis: We	t Weight		
Parameter	5110105	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Chloride		16887-00-6	19.0	9.94	mg/kg	02.13.20 19.42	1 142	1	

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# **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	AH #10 (2-2.5')		Matrix:	Soil		Date Received	:02.12.20 13.15	
Lab Sample I	d: 652161-037		Date Colle	cted: 02.12.20 00.00	Sample Depth:2 - 2.5 ft			
Analytical Me	ethod: Chloride by EPA	300				Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 15.00		Basis:	Wet Weight	
Seq Number:	3116483							
Parameter		Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil

<9.98

16887-00-6

9.98

mg/kg

02.13.20 20.02

U

1



#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample Id	Lab Sample Id: 652161-038			Soil cted: 02.12.20 00.00	Date Received:02.12.20 13.15 Sample Depth:0 - 1 ft			
2	hod: Chloride by EPA	300				Prep Method:	E300P	
100111	MAB MAB			02 12 20 15 00		% Moisture:	W/-4 W/-:-1-4	
Analyst: Seq Number:			Date Prep:	02.13.20 15.00		Basis:	Wet Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil

16887-00-6

<10.0 10.0 mg/kg

02.13.20 20.08

U

1





# **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: AH #11 (1-1.5') Lab Sample Id: 652161-039		Matrix: Date Collect	Soil ed: 02.12.20 00.00	Date Received:02.12.20 13.15 Sample Depth:1 - 1.5 ft				
Analytical Method: Chloride by EPA Tech: MAB	A 300				ep Method: E300 Moisture:	9P		
Analyst: MAB Seq Number: 3116483		Date Prep:	02.13.20 15.00	Bas	sis: Wet	Weight		
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	

<10.1 16887-00-6

10.1

02.13.20 20.14

U

1

mg/kg





# **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	AH #11 (2-2.5')		Matrix:	Soil			1:02.12.20 13.15	
Lab Sample Id		200	Date Collec	ted: 02.12.20 00.00		Sample Depth		
Tech:	thod: Chloride by EPA 3 MAB	500				Prep Method: % Moisture:	ESOOP	
Analyst:	MAB		Date Prep:	02.13.20 15.00		Basis:	Wet Weight	
Seq Number:	3116483							
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil

< 9.88

16887-00-6

9.88

9.88

02.13.20 20.21

U

1

mg/kg





### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Sample Id: AH #11 (3-3.5') Lab Sample Id: 652161-041			Soil		Date Received:02.1		5
Lab Sample I	d: 652161-041		Date Colle	cted: 02.12.20 00.00		Sample Depth: 3 - 3	3.5 ft	
Analytical Me	ethod: Chloride by EPA	A 300			I	Prep Method: E30	0P	
Tech:	MAB				ç	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 15.00	]	Basis: We	t Weight	
Seq Number:	3116483							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	15.4	9.88	mg/kg	02.13.20 20.27		1

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#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample Id	<b>AH #12 (0-1')</b> d: 652161-042		Matrix: Date Collec	Date Received:02.12.20 13.15 Sample Depth:0 - 1 ft				
Analytical Me	thod: Chloride by EPA	300				Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 15.00		Basis:	Wet Weight	
Seq Number:	3116483							
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil

16887-00-6

<9.94 9.94

02.13.20 20.34

U

1

mg/kg





### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Sample Id: <b>AH #12 (1-1.5')</b> Lab Sample Id: 652161-043			Soil		Date Received:02.		5
Lao Sample I	u: 652161-043		Date Colle	cted: 02.12.20 00.00		Sample Depth:1 -	1.5 It	
Analytical Me	ethod: Chloride by EPA	A 300			I	Prep Method: E30	00P	
Tech:	MAB				Ģ	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 15.00	1	Basis: We	t Weight	
Seq Number:	3116483							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	12.4	9.96	mg/kg	02.13.20 20.53		1

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### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample I	Sample Id: AH #12 (2-2.5') Lab Sample Id: 652161-044			Soil cted: 02.12.20 00.00		Date Received:02. Sample Depth:2 -		5
-	ethod: Chloride by EP MAB MAB	A 300	Date Prep:			Prep Method: E3 % Moisture:		
Seq Number:	3116483							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	10.3	10.1	mg/kg	02.13.20 21.12		1

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#### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample Id	<b>AH #13 (0-1')</b> : 652161-045		Matrix: Date Colle	Soil cted: 02.12.20 00.00		Date Received:02.1 Sample Depth:0 -		
Analytical Metl	hod: Chloride by EPA	300			I	Prep Method: E30	OP	
Tech:	MAB				ç	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 15.00	I	Basis: We	t Weight	
Seq Number:	3116483		-					
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	<10.0	10.0	mg/kg	02.13.20 21.18	U	1

10.0





### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	AH #13 (1-1.5')		Matrix:	Soil		Date Received	1:02.12.20 13.15	
Lab Sample I	d: 652161-046		Date Colle	cted: 02.12.20 00.00		Sample Depth	1 - 1.5 ft	
Analytical Me	thod: Chloride by EPA	300				Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 15.00		Basis:	Wet Weight	
Seq Number:	3116483							
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil

16887-00-6

<9.94 9.94 mg/kg

02.13.20 21.25 U





### **Certificate of Analytical Results 652161**

#### Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample Id	<b>AH #14 (0-1')</b> d: 652161-047		Matrix: Date Colle	Soil cted: 02.12.20 00.00		Date Received:02. Sample Depth:0 -		5
Analytical Me	thod: Chloride by EPA	300			I	Prep Method: E30	)0P	
Tech:	MAB				ç	% Moisture:		
Analyst:	MAB		Date Prep:	02.13.20 15.00	l	Basis: We	t Weight	
Seq Number:	3116483		-					
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	<10.0	10.0	mg/kg	02.13.20 21.31	U	1



# **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 LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD	Method Duplicate/Sample Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

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





#### **Tetra Tech- Midland** White Federal 1H Flowline (5.13.19)

Analytical Method: Seq Number:	Chloride by EPA 3 3116368	00		Matrix:	Solid			P	rep Metho Date Pro			
MB Sample Id:	7696527-1-BLK		LCS Sa	mple Id:	7696527-	1-BKS		LCS		1	6527-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	256	102	258	103	90-110	1	20	mg/kg	02.12.20 18:43	
Analytical Method:	Chloride by EPA 3 3116482	00		Matrix:	Calid			P	rep Metho			
Seq Number: MB Sample Id:	7696581-1-BLK		LCS Sa		7696581-	1-BKS		LCS	Date Pr D Sample		5.20 6581-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	255	102	258	103	90-110	1	20	mg/kg	02.13.20 15:34	
Analytical Method:	Chloride by EPA 3	00						P	rep Metho			
Seq Number:	3116483 7696602-1-BLK			Matrix:	Solid 7696602-	1 BKS			Date Pr		3.20 6602-1-BSD	
MB Sample Id:	7090002-1-ЫLК МВ	Spike	LCS Sa	LCS			Limits	%RP	RPD Sample	Units	Analysis	
Parameter	Result	Amount	Result	%Rec	LCSD Result	LCSD %Rec	Linuts	D	Limit	Omts	Date	Flag
Chloride	<10.0	250	255	102	258	103	90-110	1	20	mg/kg	02.13.20 18:51	
<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>Chloride by EPA 3</b> 3116368 652156-016 <b>Parent</b>	00 Spike	MS Sa MS	Matrix: mple Id: MS	Soil 652156-0 <b>MSD</b>	16 S <b>MSD</b>	Limits		rep Metho Date Pr D Sample <b>RPD</b>	ep: 02.1		
Parameter	Result	Amount	Result	%Rec	Result	%Rec	Linnts	D	Limit	emus	Date	Flag
Chloride	34.4	200	253	109	264	115	90-110	4	20	mg/kg	02.12.20 19:02	Х
<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>Chloride by EPA 3</b> (3116368 652161-008		MS Sa MS		652161-0		1:	MS	Date Pr		2.20 161-008 SD	
Parameter	Parent Result	Spike Amount	Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RP D	Limit	Units	Analysis Date	Flag

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

Chloride

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

25.8

200

237

106

239

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result

1

20

mg/kg

107 90-110

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

.

02.12.20 20:32

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#### **Tetra Tech- Midland** White Federal 1H Flowline (5.13.19)

Analytical Method:	Chloride by EPA	300						Pi	rep Metho	od: E30	0P	
Seq Number:	3116482			Matrix:	Soil				Date Pr	ep: 02.1	3.20	
Parent Sample Id:	652161-022		MS Sa	mple Id:	652161-0	22 S		MS	D Sample	e Id: 652	161-022 SD	
Parameter	Parent Result		MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	% RP D	RPD Limit	Units	Analysis Date	Flag
Chloride	24.	7 199	238	107	234	105	90-110	2	20	mg/kg	02.13.20 17:15	
<b>Analytical Method:</b> Seq Number: Parent Sample Id: <b>Parameter</b>	Chloride by EPA 3116482 652258-004 Parent Result	Spike	MS Sa MS Result	Matrix: mple Id: MS %Rec	652258-0 MSD	MSD	Limits		rep Metho Date Pro D Sample RPD Limit	ep: 02.1	3.20 258-004 SD Analysis	Flag
					Result	%Rec					Date	
Chloride	7.5	9 201	217	104	216	104	90-110	0	20	mg/kg	02.13.20 15:52	

Analytical Method:	Chloride by EPA 3	00						Pı	ep Metho	od: E30	OP	
Seq Number:	3116483			Matrix:	Soil				Date Pre	ep: 02.1	3.20	
Parent Sample Id:	652161-032		MS Sat	mple Id:	652161-0	32 S		MS	D Sample	Id: 652	161-032 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag
Chloride	6.93	200	218	106	217	105	90-110	0	20	mg/kg	02.13.20 19:10	

Analytical Method:	Chloride by EPA 30	)0						P	ep Metho	od: E30	0P	
Seq Number:	3116483			Matrix:	Soil				Date Pre	ep: 02.1	3.20	
Parent Sample Id:	652161-042		MS Sat	mple Id:	652161-0	42 S		MS	D Sample	Id: 652	161-042 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag
Chloride	4.87	200	215	105	214	105	90-110	0	20	mg/kg	02.13.20 20:40	

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference [D] = 100*(C-A) / B RPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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P, Inc.     Devin Use and Street, Sta 10	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Image: Single Signature: Inter Carmona     Image: Single Signature: Inter Carmona     Devin Dominguez       Image: Signature: Inter Sign	Image: Single Signature: Inter Carmona     Image: Signature: Inter Carmona     Devin Dominguez       Image: Signature: Inter Carmona     Image: Signature: Inter Carmona     Image: Signature: Inter Carmona     Image: Signature: Inter Carmona       Image: Signature: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona     Image: Inter Carmona       Image: Inter Carmona<
sour Wall Street, Ste 100 Midland, Texas 79705 Tel (432) 682-4559 Fax (432) 682-455 Fax (432) 68	anure:     Devin Dominguez       PLING     Mike Carmona       PLING     PLING     PLING       MATRIX     PRESERVATIVE WATER       Devin Dominguez       VALUE ON TAIL       XX     H HCLO 030       XX     XX       XX     XX       XX     XX       XX     XX       XX     XX       XX     XX       Date:     Time:       Date:     Time:       Colspan="2">Sample       Date:     Time:       Colspan="2">Colspan="2"       Date:        Tinc		

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Final 1.000

Image: Conclus         Tetra Tech, Inc.         Diversion of the second o	ved by (	CD: Inquished b	14/20	Pelinquished b	10: Annality of the second	0:53										( LAB USE ONLY	LAB #		Comments:	Hecelving Laboratory:	Invoice to:	Project Location: (county, state)	Project Name:	Client Name:		e I
Mike Carmona     Nike Carmona       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1 <td></td> <td>Date:</td> <td></td> <td>1 U Date:</td> <td>1 morely 2/12/20</td> <td>H #6 (2-2.5')</td> <td>AH #6 (1-1.5')</td> <td>AH #6 (0-1')</td> <td>AH #5 (3-3.5')</td> <td>AH #5 (2-2.5')</td> <td>AH #5 (1-1.5')</td> <td>AH #5 (0-1')</td> <td>AH #4 (3-3.5')</td> <td>AH #4 (2-2.5')</td> <td>AH #4 (1-1.5')</td> <td></td> <td>SAMPLE IDENTIFICATION</td> <td></td> <td></td> <td></td> <td>COG -</td> <td>, in the second se</td> <td></td> <td></td> <td>  ,<b>h</b></td> <td></td>		Date:		1 U Date:	1 morely 2/12/20	H #6 (2-2.5')	AH #6 (1-1.5')	AH #6 (0-1')	AH #5 (3-3.5')	AH #5 (2-2.5')	AH #5 (1-1.5')	AH #5 (0-1')	AH #4 (3-3.5')	AH #4 (2-2.5')	AH #4 (1-1.5')		SAMPLE IDENTIFICATION				COG -	, in the second se			, <b>h</b>	
Mike Carmona     Nike Carmona       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1       1     1 <td>ORIGINAL COPY</td> <td>Received by:</td> <td></td> <td>Received by:</td> <td>Heceived by:</td> <td>2/12/2020</td> <td></td> <td>YEAR: 2020</td> <td>SAMPLING</td> <td></td> <td>Sampler Signature:</td> <td></td> <td>Project #:</td> <td></td> <td>Site Manager:</td> <td></td> <td></td>	ORIGINAL COPY	Received by:		Received by:	Heceived by:	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020		YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:		
Time:     1     1     1     1     1     1     4     Containers     All of the second s		Date:	-	Date:	0人 1 ~1,	×	×	×	×	×	×	×	×	×	×	SOIL HCL	3			Devin Dor		212C-MD		Mike Carmo	901W Wall S Midland, Te Tel (432) Fax (432)	
Circle     V     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z     Z <th< td=""><td></td><td>Time:</td><td></td><td>Time:</td><td>Time:</td><td>X</td><td>×</td><td>×</td><td>×</td><td>×</td><td>×</td><td>X</td><td>×</td><td></td><td>×</td><td>ICE None</td><td>AINE</td><td></td><td></td><td>minguez</td><td></td><td>-01765</td><td></td><td>na</td><td>treet, Ste 100 exas 79705 682-4559 682-3946</td><td></td></th<>		Time:		Time:	Time:	X	×	×	×	×	×	X	×		×	ICE None	AINE			minguez		-01765		na	treet, Ste 100 exas 79705 682-4559 682-3946	
	(Circle) HAND D	2.2	Sample Tempera		1	Z	N	1 N	Z	Z	N	N	N			FILTERE BTEX 80 TPH TX1 TPH 801	D (Y 21B 005 5M (	/N) BTE (Ext to	C35)		MRO)		_			
Tracking #: Tracking #: Tracking #: Boot Series, Vol. 62/00/625 PCB's 8082 / 608 NORM PLM (Asbestos) X X X X X X X X Chloride Chloride Sulfate TDS General Water Chemistry (see attached list)	FEDEX	Special Re	] Г		REMARKS											TCLP Met TCLP Vola TCLP Ser RCI GC/MS Vo	tals / atiles ni Vo	Ag As E latiles 260B /	3a Cd Cr 624	Pb Se				ANALYSIS		
		arges Authorized eport Limits or TRRP Re	1	24 hr		×	×	×	×	×	×	×	×	×	×	PCB's 80 NORM PLM (Asb Chloride Chloride General V	82 / estos Su Vate	608 s) Ifate r Chen	TDS nistry (se		ched lis	t)		2		rage

	shed by:		1 / orman	shed by:	AH #	AH #	AH #	AH #	AH #	AH #	AH	AH	AH	LAB USE )	LAB #			Comments:	Receiving Laboratory:	(county, state) Invoice to:	Project Location:	Project Name:	Client Name:	]
	Date: Time:		20	- μο (4-4.5) Date: Time:	AH #8 (3-3.5) AH #8 (3-4.4 ch	AH #8 (2-2.5)	AH #8 (1-1.5')	AH #8 (0-1')	AH #7 (2-2.5')	AH #7 (1-1.5')	AH #7 (0-1')	AH #6 (4-4.5')	AH #6 (3-3.5')		SAMPLE IDENTIFICATION			Xenco	COG - Ike Tavarez	Eady Co, NM	White Federal 1H Flowline (5.13.19)	Concho	Tetra Tech, Inc.	
ORIGINAL COPY	Received by:	Hecelved DV	(J) (D	2/12/2020 Received by:	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		-	Project #:	Site Manager:		
	Date:	Date:	LUN 2	X Date:	×	×	×	×	×	×	×	×	×	WATEF SOIL HCL	3	MATRIX		Devin Do		212C-M		Mike Carmona	901W Wall Midland, Tel (43 Fax (43	
	Time:	Time:	-	X Time:	×	×	×	×	×	×	×	×	×	HNO ₃ ICE None		PRESERVATIVE		Devin Dominguez		212C-MD-01765		ona	901W Wall Street, Ste 100 Midland, Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946	and the second second
(Circ		San	CIE	1 N	1 N	1 N	1 N	1 . Z :	1 Z	1 Z	1 Z	1 N	Z	# CONTA	D (Y/	N)	< 8260E							
(Circle) HAND DELIVERED	5.2	Sample Temperature	LAB USE ONLY										-	TPH TX1 TPH 8018 PAH 8270 Total Meta	005 ( 5M ( 0 0C als Ag	Ext to ( GRO -	C35) DRO - C Cd Cr F	PRO - N	łg			(Circ		
FEDEX	Rush C		MEMARKS:										F	TCLP Met TCLP Vola TCLP Sen RCI GC/MS Vo	atiles ni Vol	atiles		Pb Se I	Hg			ANAL		
UPS Tracking #: _	Rush Charges Authorized  Special Report Limits or TRRP Report	Same Day 24 hr	s: STANDARD	X	×	×	××	× >	< >	< >	<	× >	F F	GC/MS Se PCB's 808 NORM PLM (Asbe Chloride	emi. V 82 / 6	'ol. 82' 08						<b>۲</b>		Page
	3d TRRP Report	thr 48 hr 72 hr										, ,	0	Chloride Chloride General W	Sulf /ater ion B	Chemi	TDS istry (se	e attac	hed lis	it)		2		
		hr													_			-						3 of

	uished by:	4/20	uished by:	onnie	uished by:	Þ	Þ	P	Þ		-				LAB USE )	LAB #			Comments:	Receiving Laboratory.	(county, state)		Project Name	
	Date: Time:		Date: Time:	a moling 2/12/20 13:5	H #11 (2-2.5')	AH #11 (1-1.5')	AH #11 (0-1')	AH #10 (2-2.5')	AH #10 (1-1.5')	AH #10 (0-1')	AH #9 (3-3.5')	AH #9 (2-2.5')	AH #9 (1-1.5')	AH #9 (0-1')		SAMPLE IDENTIFICATION			Xenco	COG - Ike Tavarez	Eddy Co, NM	White Federal 1H Flowline (5.13.19)	Concho	Tetra Tech, Inc.
	Received by:		Received by:	Heceived at:	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:	
<	Date:		C C C	L A L Pate:	X	×	×	×	×	×	×	×	×	X	TIME WATEF SOIL		MATRIX				212C-I		Mike Carmona	901W W Midlar Tel ( Fax
	e: Time:		112/20	Time:		×	×	×	×	×	×	X	×	×	HCL HNO ₃ ICE None		PRESERVATIVE METHOD		Devin Dominguez		212C-MD-01765		mona	901W Wall Street, Ste 100 Midland,Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946
(Ci		Sa	010	3	1 N	1 N	N L	N L	1 I	1 N	1 N	1 N	1 N	Z	# CONTA	D (Y/	/N)							
(Circle) HAND DELIVERED	3.2	Sample Temperature	ONLY	LAB USE											BTEX 802 TPH TX10 TPH 8015 PAH 8270 Total Meta	005 ( 5M ( 0 DC	Ext to GRO -	DRO - C	RO - N				5	
VERED FEDEX	Speci	1 Г		REMARKS:										-	TCLP Met TCLP Vola TCLP Sem RCI	als A Itiles ni Vol	g As B atiles	a Cd Cr				Circle or Sp		
UPS Tracking #:	Rush Charges Authorized	HUSH: Same Day		STANDARD										( F	GC/MS Vo GC/MS Se CB's 808 ORM PLM (Asbe	mi. V 82 / 6	/ol. 82 08					Specify Method	ANALYSIS REQUEST	
#	Rush Charges Authorized  Special Report Limits or TRRP Report	24 hr 48 hr 72 hr			× :	××	× >	× >	< >	< >	< >	< ;	×		Chloride Chloride General W Mion/Cati	Sul ater	fate Chem	TDS istry (se	e attac	hed list	t)	nod No.)		
		hr													old							_		

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	iished by:		Plinquished by:	uished by:		Ał	A	A	A	A	A	A	ONLY )	LAB #			Comments:	Receiving Laboratory:	Invoice to:	Project Location: (county, state)	roject Name:	ect Name-	Client Name:
	Date: Time:		Date: Time:	And a Date: Time:		AH #14 (0-1')	AH #13 (1-1.5')	AH #13 (0-1')	AH #12 (2-2.5')	AH #12 (1-1.5')	AH #12 (0-1')	AH #11 (3-3.5')		SAMPLE IDENTIFICATION			Xenco	COG - Ike Tavarez		Eddy Co, NM	White Federal 1H Flowline (5.13.19)	Concho	Tetra Tech, Inc.
	Received by:	neceived by:	Brook	Received by:		2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	2/12/2020	DATE	YEAR: 2020	SAMPLING			Sampler Signature:		Project #:		Site Manager:	
	Date:	Date:	Lun:	Date:		×	×	×	×	X	×	×	TIME WATEF SOIL	3	G MATRIX					2120-		Mike Carmona	901W 1 Midi Tel Fax
	te: Time:	te: Time:	1,2/20	Ite: Time:		×	×	×	×	×	×	×	HCL HNO ₃ ICE None		PRESERVATIVE		Devin Dominguez			212C-MD-01765		rmona	901W Wall Street, Ste 100 Midland,Texas 79705 Tel (432) 682-4559 Fax (432) 682-3946
(Circ		San	315			-1 - N	1 . Z	N I	1 . Z	1 N	1 N	Z	# CONT/ FILTERE BTEX 80	D (Y/I	N)	\$ 8260							
(Circle) HAND DELIVERED	2.2	Sample Temperature	ONLY										TPH TX1 TPH 801 PAH 827 Total Meta	005 (E 5M ( G 0C als Ag	Ext to ( GRO - As Ba	C35) DRO - ( Cd Cr	DRO -	Hg			(Circ		
FEDEX	- Rush Ct Special f	RUSH	X ST/	DEMADYC.									TCLP Met TCLP Vola TCLP Ser RCI GC/MS Vo	atiles ni Vola	atiles		Pb Se	Hg			rcle or Speci	ANA	
IIPS Tracking #:	Rush Charges Authorized	RUSH: Same Day 24 hr	STANDARD		>	× >	× ×	< >	< ×	<	× >	( F	CB's 80 CB's 80 NORM PLM (Asbe Chloride	emi. Vo 32 / 60	ol. 82						cify Method	S REQUEST	
	RRP Report	hr 48 hr 72 hr										(	Chloride General V Inion/Cat	Sulfa /ater ( ion Ba	Chemi	TDS stry (se	e atta	ched I	ist)		H No.)		
	maging:			H					-				old								-		

#### **XENCO** Laboratories

#### Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland	Acceptable Temperature Range: 0 - 6 degC					
Date/ Time Received: 02.12.2020 01.15.00 PM	Air and Metal samples Acceptable Range: Ambient					
Work Order #: 652161	Temperature Measuring device used : T-NM-007					
Sample Recei	pt Checklist Comments					
#1 *Temperature of cooler(s)?	3.2					
#2 *Shipping container in good condition?	Yes					
#3 *Samples received on ice?	Yes					
#4 *Custody Seals intact on shipping container/ cooler?	Yes					
#5 Custody Seals intact on sample bottles?	Yes					
#6*Custody Seals Signed and dated?	Yes					
#7 *Chain of Custody present?	Yes					
#8 Any missing/extra samples?	Νο					
#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)?	Νο					
#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: Elizabeth McClellan
Checklist reviewed by: Jessica Warmer

Date: 02.12.2020

Jessica Kramer

Date: 02.12.2020



# Analytical Report 660363

for

**Tetra Tech- Midland** 

**Project Manager: Mike Carmona** 

COG White Federal Com #1H (5.13.19)

#### 212C-MD-02125

#### 05.05.2020

Collected By: Client



1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)

Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

# Certificate of Analysis Summary 660363

Tetra Tech- Midland, Midland, TX

Project Name: COG White Federal Com #1H (5.13.19)

 Date Received in Lab:
 Fri 05.01.2020 09:09

 Report Date:
 05.05.2020 18:15

Project Manager: Jessica Kramer

	Lab Id:	660363-00	01	660363-00	02	660363-00	)3	660363-00	)4	660363-0	05	660363-00	)6
Analysis Requested	Field Id:	AH-1 (0-1	)	AH-1 (1'-1.	5')	AH-1 (2'-2.5	')	AH-1 (2.5'-3	')	AH-2 (0-1	)	AH-2 (1'-1.5'	') (
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.30.2020 0	00:00	04.30.2020 (	00:00	04.30.2020 (	00:00	04.30.2020 0	00:00	04.30.2020	00:00	04.30.2020 0	00:00
Chloride by EPA 300	Extracted:	05.02.2020	12:15	05.02.2020 1	2:15	05.02.2020 1	2:15	05.02.2020	2:15	05.02.2020	12:15	05.02.2020 1	2:15
	Analyzed:	05.02.2020	18:05	05.02.2020 1	8:10	05.02.2020 1	8:26	05.02.2020	8:31	05.02.2020	18:37	05.02.2020 1	8:42
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		29.2	5.00	21.5	5.00	16.2	5.00	36.5	5.00	387	5.00	1100	5.00

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.

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Jessica Kramer Project Manager

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Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

# Certificate of Analysis Summary 660363

Tetra Tech- Midland, Midland, TX

**Project Name: COG White Federal Com #1H (5.13.19)** 

 Date Received in Lab:
 Fri 05.01.2020 09:09

 Report Date:
 05.05.2020 18:15

Project Manager: Jessica Kramer

	Lab Id:	660363-0	07	660363-0	08	660363-0	09	660363-0	10	660363-0	)11	660363-0	12
Analysis Requested	Field Id:	AH-2 (2'-2.	5')	AH-3 (0-1	')	AH-3 (1'-1.5	')	AH-4 (0-1)		AH-4 (1'-1.:	5')	AH-4 (2'-2.5	')
Analysis Requested	Depth:												
	Matrix:	SOIL											
	Sampled:	04.30.2020 0	00:00	04.30.2020 (	00:00	04.30.2020	00:00	04.30.2020 0	00:00	04.30.2020	00:00	04.30.2020 (	00:00
Chloride by EPA 300	Extracted:	05.02.2020	12:15	05.02.2020	12:15	05.02.2020	12:15	05.02.2020	14:15	05.02.2020	14:15	05.02.2020 1	14:15
	Analyzed:	05.02.2020	18:47	05.02.2020	18:52	05.02.2020	18:58	05.02.2020	19:29	05.02.2020	19:45	05.02.2020 1	19:50
	Units/RL:	mg/kg	RL										
Chloride		2740	25.0	15.0	5.00	20.1	5.00	177	4.97	456	5.01	1910	25.1

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Jessica Kramer Project Manager

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Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

# Certificate of Analysis Summary 660363

Tetra Tech- Midland, Midland, TX

**Project Name: COG White Federal Com #1H (5.13.19)** 

 Date Received in Lab:
 Fri 05.01.2020 09:09

 Report Date:
 05.05.2020 18:15

Project Manager: Jessica Kramer

	Lab Id:	660363-0	13	660363-01	4	660363-01	5	660363-0	6	660363-0	17	660363-01	18
Analysis Requested	Field Id:	AH-4 (3'-3.	5')	AH-5 (0-1')		AH-5 (1'-1.5')		AH-5 (2'-2.5	)	AH-5 (3'-3.5')		AH-6 (0-1')	
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.30.2020	00:00	04.30.2020 0	0:00	04.30.2020 0	00:00	04.30.2020 (	00:00	04.30.2020	00:00	04.30.2020 0	00:00
Chloride by EPA 300	Extracted:	05.02.2020	14:15	05.02.2020 1	4:15	05.02.2020 1	4:15	05.02.2020 1	4:15	05.02.2020	14:15	05.02.2020 1	4:15
	Analyzed:	05.02.2020	19:56	05.02.2020 2	0:01	05.02.2020 2	0:17	05.02.2020 2	0:22	05.02.2020	20:27	05.02.2020 2	20:33
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2540	24.8	13.6	4.98	21.9	5.02	8.67	4.99	6.60	5.04	14.1	5.05

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Jessica Kramer Project Manager

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Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

# Certificate of Analysis Summary 660363

Tetra Tech- Midland, Midland, TX

**Project Name: COG White Federal Com #1H (5.13.19)** 

 Date Received in Lab:
 Fri 05.01.2020 09:09

 Report Date:
 05.05.2020 18:15

Project Manager: Jessica Kramer

	Lab Id:	660363-0	19	660363-02	20	660363-02	21	660363-02	22	660363-0	23	660363-02	24
Analysis Requested	Field Id:	AH-6 (1'-1.	5')	AH-6 (2'-2.	5')	AH-6 (3-3.5')		AH-6 (4'-4.5')		AH-7 (0-1')		AH-7 (1'-1.5'	)
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.30.2020 0	00:00	04.30.2020 0	00:00	04.30.2020 (	00:00	04.30.2020 (	00:00	04.30.2020	00:00	04.30.2020 0	00:00
Chloride by EPA 300	Extracted:	05.02.2020	14:15	05.02.2020	14:15	05.02.2020 1	4:15	05.02.2020 1	4:15	05.02.2020	14:15	05.02.2020 1	4:15
	Analyzed:	05.02.2020	20:38	05.02.2020 2	20:43	05.02.2020 2	20:59	05.02.2020 2	21:04	05.02.2020	21:20	05.02.2020 2	21:25
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		21.4	5.00	48.1	5.03	14.1	5.00	10.0	4.99	10.7	5.01	18.6	5.05

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Jessica Kramer Project Manager

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Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

# Certificate of Analysis Summary 660363

Tetra Tech- Midland, Midland, TX

**Project Name: COG White Federal Com #1H (5.13.19)** 

 Date Received in Lab:
 Fri 05.01.2020 09:09

 Report Date:
 05.05.2020 18:15

Project Manager: Jessica Kramer

	Lab Id:	660363-02	25	660363-02	26	660363-02	27	660363-02	28	660363-0	29	660363-03	30
Analysis Requested	Field Id:	AH-7 (2'-2.	5')	AH-8 (0-1')		AH-8 (1'-1.5')		AH-8 (2'-2.5')		AH-8 (3'-3.5')		AH-8 (4'-4.5'	)
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.30.2020 0	00:00	04.30.2020 0	00:00	04.30.2020 0	00:00	04.30.2020 0	00:00	04.30.2020	00:00	04.30.2020 0	00:00
Chloride by EPA 300	Extracted:	05.02.2020	14:15	05.02.2020 1	4:15	05.02.2020	4:15	05.02.2020	4:15	05.02.2020	14:15	05.02.2020 1	4:32
	Analyzed:	05.02.2020	21:31	05.02.2020 2	21:36	05.02.2020 2	21:41	05.02.2020 2	21:46	05.02.2020	21:52	05.02.2020 2	22:23
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		22.8	5.00	6.43	4.99	9.31	4.99	9.85	4.99	12.7	4.98	2180	24.9

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Jessica Kramer Project Manager

Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

# Certificate of Analysis Summary 660363

Tetra Tech- Midland, Midland, TX

Project Name: COG White Federal Com #1H (5.13.19)

 Date Received in Lab:
 Fri 05.01.2020 09:09

 Report Date:
 05.05.2020 18:15

Project Manager: Jessica Kramer

	Lab Id:	660363-03	31	660363-03	32	660363-03	33	660363-03	34	660363-0	35	660363-03	36
Analysis Requested	Field Id:	AH-9 (0-1	)	AH-9 (1'-1.	5')	AH-9 (2'-2.5')		AH-9 (3'-3.5')		AH-10 (0-1')		AH-10 (1'-1.5	5')
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.30.2020 0	00:00	04.30.2020 (	00:00	04.30.2020 0	00:00	04.30.2020 0	00:00	04.30.2020	00:00	04.30.2020 0	00:00
Chloride by EPA 300	Extracted:	05.02.2020	14:32	05.02.2020 1	4:32	05.02.2020 1	4:32	05.02.2020	4:32	05.02.2020	14:32	05.02.2020 1	4:32
	Analyzed:	05.02.2020 2	22:39	05.02.2020 2	22:44	05.02.2020 2	2:50	05.02.2020 2	22:55	05.02.2020	23:11	05.02.2020 2	23:16
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		21.7	4.97	7.54	4.96	<4.96	4.96	6.24	5.02	6.77	5.00	16.8	4.96

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Jessica Kramer Project Manager

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Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

# Certificate of Analysis Summary 660363

Tetra Tech- Midland, Midland, TX

**Project Name: COG White Federal Com #1H (5.13.19)** 

 Date Received in Lab:
 Fri 05.01.2020 09:09

 Report Date:
 05.05.2020 18:15

Project Manager: Jessica Kramer

	Lab Id:	660363-0	37	660363-03	38	660363-03	39	660363-04	40	660363-0	41	660363-04	42
Analysis Requested	Field Id:	AH-10 (2'-2	.5')	AH-11 (0-1')		AH-11 (1'-1.5')		AH-11 (2'-2.5')		AH-11 (3'-3.5')		AH-12 (0-1	)
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.30.2020	00:00	04.30.2020 (	00:00	04.30.2020 (	00:00	04.30.2020 0	00:00	04.30.2020	00:00	04.30.2020 0	00:00
Chloride by EPA 300	Extracted:	05.02.2020	14:32	05.02.2020 1	4:32	05.02.2020 1	4:32	05.02.2020	14:32	05.02.2020	14:32	05.02.2020 1	14:32
	Analyzed:	05.02.2020	23:21	05.02.2020 2	23:26	05.02.2020 2	23:32	05.02.2020 2	23:37	05.02.2020	23:53	05.02.2020 2	23:58
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		20.4	5.01	11.7	4.97	14.6	4.97	15.2	4.99	16.8	5.04	12.1	5.05

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Jessica Kramer Project Manager

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Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

# Certificate of Analysis Summary 660363

Tetra Tech- Midland, Midland, TX

Project Name: COG White Federal Com #1H (5.13.19)

 Date Received in Lab:
 Fri 05.01.2020 09:09

 Report Date:
 05.05.2020 18:15

Project Manager: Jessica Kramer

	Lab Id:	660363-04	43	660363-04	14	660363-04	45	660363-04	46	660363-0	47	
Analysis Requested	Field Id:	AH-12 (1'-1	.5')	AH-12 (2'-2	.5')	AH-13 (0-1'	)	AH-13 (1'-1.5	5')	AH-14 (0-1	)	
Analysis Requested	Depth:											
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	04.30.2020 (	00:00	04.30.2020 (	00:00	04.30.2020 (	00:00	04.30.2020 (	00:00	04.30.2020	00:00	
Chloride by EPA 300	Extracted:	05.02.2020	14:32	05.02.2020 1	4:32	05.02.2020 1	14:32	05.02.2020	14:32	05.02.2020	14:32	
	Analyzed:	05.03.2020 (	00:14	05.03.2020 (	0:19	05.03.2020 (	00:24	05.03.2020 (	00:30	05.03.2020	00:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		14.4	5.03	17.4	4.99	25.3	4.95	16.6	5.05	12.4	4.99	

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05.05.2020

Project Manager: **Mike Carmona Tetra Tech- Midland** 901 West Wall ST Midland, TX 79701

Reference: XENCO Report No(s): **660363 COG White Federal Com #1H (5.13.19)** Project Address: Eddy County,New Mexico

#### Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 660363. 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. 660363 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,

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Jessica Kramer Project Manager

A Small Business and Minority Company

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#### Received by OCD: 5/14/2021 10:15:53 AM



#### Sample Id

ATT 1 (0, 1')
AH-1 (0-1')
AH-1 (1'-1.5')
AH-1 (2'-2.5')
AH-1 (2.5'-3')
AH-2 (0-1')
AH-2 (1'-1.5')
AH-2 (2'-2.5')
AH-3 (0-1')
AH-3 (1'-1.5')
AH-4 (0-1')
AH-4 (1'-1.5')
AH-4 (2'-2.5')
AH-4 (3'-3.5')
AH-5 (0-1')
AH-5 (1'-1.5')
AH-5 (2'-2.5')
AH-5 (3'-3.5')
AH-6 (0-1')
AH-6 (1'-1.5')
AH-6 (2'-2.5')
AH-6 (3-3.5')
AH-6 (4'-4.5')
AH-7 (0-1')
AH-7 (1'-1.5')
AH-7 (2'-2.5')
AH-8 (0-1')
AH-8 (1'-1.5')
AH-8 (2'-2.5')
AH-8 (3'-3.5')
AH-8 (4'-4.5')
AH-9 (0-1')
AH-9 (1'-1.5')
AH-9 (2'-2.5')
AH-9 (3'-3.5')
AH-10 (0-1')
AH-10 (1'-1.5')
AH-10 (2'-2.5')
AH-11 (0-1')
AH-11 (1'-1.5')
AH-11 (2'-2.5')
AH-11 (3'-3.5')
AH-12 (0-1')
AH-12 (1'-1.5')

#### Sample Cross Reference 660363

#### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	04.30.2020 00:00		660363-001
S	04.30.2020 00:00		660363-002
S	04.30.2020 00:00		660363-003
S	04.30.2020 00:00		660363-004
S	04.30.2020 00:00		660363-005
S	04.30.2020 00:00		660363-006
S	04.30.2020 00:00		660363-007
S	04.30.2020 00:00		660363-008
S	04.30.2020 00:00		660363-009
S	04.30.2020 00:00		660363-010
S	04.30.2020 00:00		660363-011
S	04.30.2020 00:00		660363-012
S	04.30.2020 00:00		660363-013
S	04.30.2020 00:00		660363-014
S	04.30.2020 00:00		660363-015
S	04.30.2020 00:00		660363-016
S	04.30.2020 00:00		660363-017
S	04.30.2020 00:00		660363-018
S	04.30.2020 00:00		660363-019
S	04.30.2020 00:00		660363-020
S	04.30.2020 00:00		660363-021
S	04.30.2020 00:00		660363-022
S	04.30.2020 00:00		660363-023
S	04.30.2020 00:00		660363-024
S	04.30.2020 00:00		660363-025
S	04.30.2020 00:00		660363-026
S	04.30.2020 00:00		660363-027
S	04.30.2020 00:00		660363-028
S	04.30.2020 00:00		660363-029
S	04.30.2020 00:00		660363-030
S	04.30.2020 00:00		660363-031
S	04.30.2020 00:00		660363-032
S	04.30.2020 00:00		660363-033
S	04.30.2020 00:00		660363-034
S	04.30.2020 00:00		660363-035
S	04.30.2020 00:00		660363-036
S	04.30.2020 00:00		660363-037
S	04.30.2020 00:00		660363-038
S	04.30.2020 00:00		660363-039
S	04.30.2020 00:00		660363-040
S	04.30.2020 00:00		660363-041
S	04.30.2020 00:00		660363-042
S	04.30.2020 00:00		660363-043

#### Received by OCD: 5/14/2021 10:15:53 AM



AH-12 (2'-2.5') AH-13 (0-1') AH-13 (1'-1.5') AH-14 (0-1')

#### Sample Cross Reference 660363

#### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

S	04.30.2020 00:00	660363-044
S	04.30.2020 00:00	660363-045
S	04.30.2020 00:00	660363-046
S	04.30.2020 00:00	660363-047



#### **CASE NARRATIVE**

Client Name: Tetra Tech- Midland Project Name: COG White Federal Com #1H (5.13.19)

Project ID: 212C-MD-02125 Work Order Number(s): 660363 
 Report Date:
 05.05.2020

 Date Received:
 05.01.2020

#### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Chlorido		16997 00 6	20.2	5.00	ma/Ira	05 02 2020 18.05		1		
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil		
Seq Number:	3124966									
Analyst:	SPC		Date Pre	ep: 05.02.2020	12:15	Basis: W	et Weight			
Tech:	SPC					% Moisture:				
Analytical M	ethod: Chloride by E	EPA 300				Prep Method: E	300P			
Lab Sample I	ld: 660363-001		Date Co	llected: 04.30.2020	00:00					
Sample Id:	AH-1 (0-1')		Matrix:	Soil		Date Received:05	5.01.2020 09	9:09		

16887-00-6 29.2

5.00

mg/kg 05.02.2020 18:05

1

.

Released to Imaging: 7/22/2021 11:35:28 AM



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-1 (1'-1.5')           Lab Sample Id:         660363-002		Matrix: Date Col	Soil lected: 04.30.2020 00:0	)0	Date Received:05.01.2020 09:09				
Analytical Method: Chloride by EPA Tech: SPC	300				Prep Method: E % Moisture:	300P			
Analyst: SPC		Date Pre	p: 05.02.2020 12:1	15	Basis: W	Vet Weight			
Seq Number: 3124966									
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil		
Chlorida	16997 00 6	21.5	5.00	malka	05 02 2020 18:1	n	1		

16887-00-6 21.5

5.00

mg/kg 05.02.2020 18:10

1

.

Released to Imaging: 7/22/2021 11:35:28 AM



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-1 (2'-2.5')           Lab Sample Id:         660363-003	Matrix Date C	: Soil ollected: 04.30.2020		Date Received:05.01.2020 09:0				
Analytical Method: Chloride by EPA 300 Tech: SPC				Prep Method: E3 % Moisture:				
Analyst: SPC Seq Number: 3124966	Date P	rep: 05.02.2020	12:15	Basis: We	et Weight			
Parameter Cas Nu	ımber Result	RL	Units	Analysis Date	Flag	Dil		
Chloride 16887-00	<b>16.2</b>	5.00	mg/kg	05.02.2020 18:26		1		

Released to Imaging: 7/22/2021 11:35:28 AM



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-1 (2.5'-3')           Lab Sample Id:         660363-004		Matrix: Date Colle	Soil ccted: 04.30.2020 00:00		Date Received:05.01.2020 09:09				
Analytical Method: Chloride by EPA Tech: SPC	300				Prep Method: % Moisture:	E300F	)		
Analyst: SPC Seq Number: 3124966		Date Prep:	05.02.2020 12:15		Basis:	Wet W	Veight		
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil	
Chloride	16887-00-6	36.5	5.00	mg/kg	05.02.2020 18	8:31		1	



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-2 (0-1')           Lab Sample Id:         660363-005		Matrix: Date Colle	Soil ccted: 04.30.2020 00:00		Date Received	)9		
Analytical Method: Chloride by EPA Tech: SPC	300				Prep Method: % Moisture:	E300P		
Analyst: SPC Seq Number: 3124966		Date Prep:	05.02.2020 12:15		Basis:	Wet W	eight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate ]	Flag	Dil
Chloride	16887-00-6	387	5.00	mg/kg	05.02.2020 18	8:37		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-2 (1'-1.5')           Lab Sample Id:         660363-006		Matrix: Date Colle	Soil ected: 04.30.2020 00:00		Date Received	Date Received:05.01.2020 09:0				
Analytical Method: Chloride by EPA 3 Tech: SPC	300				Prep Method: % Moisture:	E300	Р			
Analyst: SPC Seq Number: 3124966		Date Prep:	05.02.2020 12:15		Basis:	Wet V	Weight			
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil		
Chloride	16887-00-6	1100	5.00	mg/kg	05.02.2020 18	8:42		1		



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-2 (2'-2.5')           Lab Sample Id:         660363-007		Matrix: Date Colle	Soil cted: 04.30.2020 00:00		Date Received	Date Received:05.01.2020 09:				
Analytical Method: Chloride by EPA Tech: SPC	300				Prep Method: % Moisture:	E300P				
Analyst: SPC Seq Number: 3124966		Date Prep:	05.02.2020 12:15		Basis:	Wet We	eight			
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate F	lag	Dil		
Chloride	16887-00-6	2740	25.0	mg/kg	05.02.2020 18	8:47		5		



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-3 (0-1')           Lab Sample Id:         660363-008		Matrix: Date Colle	Soil cted: 04.30.2020 00:00		Date Received	09		
Analytical Method: Chloride by EPA 3 Tech: SPC	300				Prep Method: % Moisture:	E300]	Р	
Analyst: SPC Seq Number: 3124966		Date Prep:	05.02.2020 12:15		Basis:	Wet V	Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	15.0	5.00	mg/kg	05.02.2020 18	8:52		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id: Lab Sample Id	<b>AH-3 (1'-1.5')</b> d: 660363-009		Matrix: Date Col	Soil lected: 04.30.2020 00:0	)0	Date Received	9:09	
Analytical Me Tech:	ethod: Chloride by EPA SPC	300				Prep Method: % Moisture:	E300P	
Analyst:	SPC		Date Prej	p: 05.02.2020 12:1	15	Basis:	Wet Weight	
Seq Number:	3124966							
Parameter		Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil
Chloride		16887-00-6	20.1	5.00	mg/kg	05.02.2020 18	:58	1

Released to Imaging: 7/22/2021 11:35:28 AM



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Parameter		Cas Number	Result	RL		Units	Analysis D	ate	Flag	Dil	
Seq Number:	3124967										
Analyst:	SPC		Date Pr	ep:	05.02.2020 14:15		Basis:	Wet	Weight		
Tech:	SPC						% Moisture:				
Analytical M	ethod: Chloride by EPA	300					Prep Method:	E300	)P		
Lab Sample I	d: 660363-010		Date Co	ollecte	d: 04.30.2020 00:00						
Sample Id:	Sample Id: <b>AH-4 (0-1')</b> Lab Sample Id: 660363-010				Soil		Date Receive	Date Received:05.01.2020 09:09			

16887-00-6 **177** 

4.97

mg/kg 05.02.2020 19:29

1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-4 (1'-1.5')           Lab Sample Id:         660363-011		Matrix: Date Colle	Soil ected: 04.30.2020 00:00		Date Received	09		
Analytical Method: Chloride by EPA 3 Tech: SPC	00				Prep Method: % Moisture:	E300]	Р	
Analyst: SPC Seg Number: 3124967		Date Prep	05.02.2020 14:15		Basis:	Wet V	Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	456	5.01	mg/kg	05.02.2020 19	9:45		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id: <b>AH-4 (2'-2.5')</b> Lab Sample Id: 660363-012		Matrix: Date Colle	Soil octed: 04.30.2020 00:00	)	Date Received	020 09:0	)9	
Analytical Method: Chloride by EPA Tech: SPC	300				Prep Method: % Moisture:			
Analyst: SPC Seq Number: 3124967		Date Prep:	05.02.2020 14:15		Basis:	Wet We	eight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate F	lag	Dil
Chloride	16887-00-6	1910	25.1	mg/kg	05.02.2020 19	9:50		5



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-4 (3'-3.5')           Lab Sample Id:         660363-013		Matrix: Date Collected	Soil 1: 04.30.2020 00:00		Date Received	:05.01.	2020 09:09	9
Analytical Method: Chloride by EPA 300 Tech: SPC	)				Prep Method: % Moisture:	E300P	)	
Analyst: SPC Seg Number: 3124967		Date Prep:	05.02.2020 14:15		Basis:	Wet W	Veight	
	Cas Number R	esult RL		Units	Analysis Da	ıte	Flag	Dil
Chloride 16	887-00-6	<b>2540</b> 2	4.8	mg/kg	05.02.2020 19	:56		5

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# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-5 (0-1')           Lab Sample Id:         660363-014		Matrix: Date Colle	Soil ected: 04.30.2020 00:00		Date Received	1:05.01.	.2020 09:0	)9
Analytical Method: Chloride by EPA 3 Tech: SPC	00				Prep Method: % Moisture:	E300F	2	
Analyst: SPC Seg Number: 3124967		Date Prep	05.02.2020 14:15		Basis:	Wet V	Veight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	13.6	4.98	mg/kg	05.02.2020 20	0:01		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Parameter		Cas Number	Result	RL		Units	Analysis D	ate	Flag	Dil
Seq Number:	3124967									
Analyst:	SPC		Date Pre	ep:	05.02.2020 14:15		Basis:	Wet	Weight	
Tech:	SPC						% Moisture:			
Analytical Me	ethod: Chloride by EPA	300					Prep Method:	E300	OP	
Lab Sample Io	d: 660363-015		Date Collected: 04.30.2020 00:00							
Sample Id:	AH-5 (1'-1.5')		Matrix:		Soil		Date Received	1:05.0	1.2020 09:	09

16887-00-6 **21.9** 

5.02

mg/kg 05.02.2020 20:17

1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-5 (2'-2.5')           Lab Sample Id:         660363-016		Matrix: Date Colle	Soil ected: 04.30.2020 00:00		Date Received	1:05.01	.2020 09:0	)9
Analytical Method: Chloride by EPA 3 Tech: SPC	00				Prep Method: % Moisture:	E300]	Р	
Analyst: SPC Seg Number: 3124967		Date Prep	: 05.02.2020 14:15		Basis:	Wet V	Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	8.67	4.99	mg/kg	05.02.2020 20	0:22		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-5 (3'-3.5')           Lab Sample Id:         660363-017		Matrix: Date Collecte	Soil d: 04.30.2020 00:00		Date Received	:05.01.	2020 09:0	9
Analytical Method: Chloride by EPA 300 Tech: SPC	)				Prep Method: % Moisture:	E300F	)	
Analyst: SPC Seg Number: 3124967		Date Prep:	05.02.2020 14:15		Basis:	Wet W	Veight	
	Cas Number R	lesult RI		Units	Analysis Da	ite	Flag	Dil
Chloride 16	6887-00-6	6.60	5.04	mg/kg	05.02.2020 20	):27		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-6 (0-1')           Lab Sample Id:         660363-018		Matrix: Date Col	Soil lected: 04.30.2020 00:00	)	Date Received:05.01.2020 (			
Analytical Method: Chloride by EPA 30 Tech: SPC	00				Prep Method: % Moisture:	E300F	)	
Analyst:SPCSeq Number:3124967		Date Pre	p: 05.02.2020 14:15		Basis:	Wet W	Veight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride 1	6887-00-6	14.1	5.05	mg/kg	05.02.2020 20	):33		1

16887-00-6 14.1

5.05



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-6 (1'-1.5')           Lab Sample Id:         660363-019		Matrix: Date Col	Soil lected: 04.30.2020 00:00		Date Received:05.01.2020			09
Analytical Method: Chloride by EPA 3 Tech: SPC	600				Prep Method: % Moisture:	E300P		
Analyst: SPC Seq Number: 3124967		Date Prep	p: 05.02.2020 14:15		Basis:	Wet W	eight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate ]	Flag	Dil
Chloride	16887-00-6	21.4	5.00	mg/kg	05.02.2020 20	):38		1

16887-00-6 21.4



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id: Lab Sample Id	<b>AH-6 (2'-2.5')</b> 1: 660363-020		Matrix: Date Coll	Soil ected: 04.30.2020 00:00	)	Date Received	1:05.01.202	20 09:09
Analytical Me Tech:	thod: Chloride by EPA	. 300				Prep Method: % Moisture:	E300P	
Analyst:	SPC		Date Prep	05.02.2020 14:15	i	Basis:	Wet Weig	ght
Seq Number: Parameter	3124967	Cas Number	Result	RL	Units	Analysis Da	nte Fla	ag Dil
Chloride		16887-00-6	48.1	5.03	mg/kg	05.02.2020 20	):43	1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-6 (3-3.5')           Lab Sample Id:         660363-021		Matrix: Date Col	Soil lected: 04.30.2020 00:00		Date Received:05.01.2020			:09
Analytical Method: Chloride by EPA 3 Tech: SPC	00				Prep Method: % Moisture:	E300	)P	
Analyst: SPC Seq Number: 3124967		Date Prej	p: 05.02.2020 14:15		Basis:	Wet	Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	14.1	5.00	mg/kg	05.02.2020 20	0:59		1

16887-00-6 14.1

5.00



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-6 (4'-4.5')           Lab Sample Id:         660363-022			Soil 04.30.2020 00:00	Ι	Date Received:	05.01.20	20 09:09	)
Analytical Method: Chloride by EPA 300 Tech: SPC Analyst: SPC Sea Number: 3124967		ate Prep:	05.02.2020 14:15	9	Prep Method: % Moisture: Basis:	E300P Wet Wei	ght	
Parameter Ca	as Number Result			Units	Analysis Da		ag	Dil
Chloride 168	87-00-6	<b>10.0</b> 4.9	9 n	ng/kg	05.02.2020 21:	:04		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:       AH-7 (0-1')       Matrix:       Soil       Date Received: 05.01.2020 09:09         Lab Sample Id:       660363-023       Date Collected: 04.30.2020 00:00       Prep Method:       E300P         Analytical Method:       Chloride by EPA 300       Prep Method:       E300P       % Moisture:         Tech:       SPC       Date Prep:       05.02.2020 14:15       Basis:       Wet Weight         Seq Number:       3124967       Totas Number       Result       Result       Units       Analysis L       Flag       I	Chlorido		16997 00 6	10.7	5.01	malta	05 02 2020 21.20	)	1
Lab Sample Id:       660363-023       Date Collected: 04.30.2020 00:00         Analytical Method:       Chloride by EPA 300       Prep Method:       E300P         Tech:       SPC       % Moisture:       Moisture:         Analyst:       SPC       Date Prep:       05.02.2020 14:15       Basis:       Wet Weight	Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Lab Sample Id:       660363-023       Date Collected: 04.30.2020 00:00         Analytical Method:       Chloride by EPA 300       Prep Method: E300P         Tech:       SPC       % Moisture:         SPC       % Moisture:	Seq Number:	3124967							
Lab Sample Id:660363-023Date Collected:04.30.202000:00Analytical Method:Chloride by EPA 300Prep Method:E300P	Analyst:	SPC		Date Pre	p: 05.02.2	020 14:15	Basis: W	et Weight	
Lab Sample Id:         660363-023         Date Collected:         04.30.2020         00:00	Tech:	SPC					% Moisture:		
	Analytical M	ethod: Chloride by El	PA 300				Prep Method: E	300P	
Sample Id:AH-7 (0-1')Matrix:SoilDate Received:05.01.2020 09:09	Lab Sample I	d: 660363-023		Date Co	llected: 04.30.2	020 00:00			
	Sample Id:	AH-7 (0-1')		Matrix:	Soil		Date Received:05	5.01.2020 09	:09

16887-00-6 10.7 5.01

mg/kg 05.02.2020 21:20

1

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# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-7 (1'-1.5')           Lab Sample Id:         660363-024	Matrix: Date Co	Soil ollected: 04.30.2020 00:0	00	Date Received	:05.01.2020 (	)9:09
Analytical Method: Chloride by EPA 300 Tech: SPC				Prep Method: % Moisture:	E300P	
Analyst:SPCSeq Number:3124967	Date Pr	ep: 05.02.2020 14:1	.5	Basis:	Wet Weight	
Parameter Cas N	umber Result	RL	Units	Analysis Da	ite Flag	Dil
Chloride 16887-0	0-6 18.6	5.05	mg/kg	05.02.2020 21	:25	1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-7 (2'-2.5')           Lab Sample Id:         660363-025		Matrix: Date Collected:	Soil 04.30.2020 00:00		Date Received	05.01.2020 0	9:09
Analytical Method: Chloride by EPA 300 Tech: SPC					Prep Method: % Moisture:	E300P	
Analyst: SPC Seq Number: 3124967		Date Prep:	05.02.2020 14:15		Basis:	Wet Weight	
Parameter Ca	as Number Re	esult RL		Units	Analysis Da	te Flag	Dil
Chloride 168	87-00-6	<b>22.8</b> 5.	00	mg/kg	05.02.2020 21	:31	1

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# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-8 (0-1')           Lab Sample Id:         660363-026		Matrix: Date Colle	Soil ected: 04.30.2020 00:00	I	Date Received	1:05.01.	2020 09:	09
Analytical Method: Chloride by EPA 3 Tech: SPC	300				Prep Method: % Moisture:	E300F	)	
Analyst: SPC Seg Number: 3124967		Date Prep	05.02.2020 14:15		Basis:	Wet W	Veight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	6.43	4.99	mg/kg	05.02.2020 21	1:36		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-8 (1'-1.5')           Lab Sample Id:         660363-027		Matrix: Date Collected	Soil : 04.30.2020 00:00		Date Received	:05.01.	.2020 09:0	9
Analytical Method: Chloride by EPA 300 Tech: SPC					Prep Method: % Moisture:	E300F	2	
Analyst: SPC Seq Number: 3124967		Date Prep:	05.02.2020 14:15		Basis:	Wet V	Veight	
Parameter C	as Number Ro	esult RL		Units	Analysis Da	ite	Flag	Dil
Chloride 168	387-00-6	<b>9.31</b> 4	.99	mg/kg	05.02.2020 21	:41		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-8 (2'-2.5')           Lab Sample Id:         660363-028		Matrix: Date Colle	Soil ected: 04.30.2020 00:00	)	Date Received	1:05.01	.2020 09:	09
Analytical Method: Chloride by EPA 3 Tech: SPC	800				Prep Method: % Moisture:	E300]	Р	
Analyst: SPC Seg Number: 3124967		Date Prep	05.02.2020 14:15		Basis:	Wet V	Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	9.85	4.99	mg/kg	05.02.2020 2	1:46		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-8 (3'-3.5')           Lab Sample Id:         660363-029		Matrix: Date Col	Soil llected: 04.30.2020 00:0	00	Date Received:	05.01.2020 09	9:09
Analytical Method: Chloride by EPA 30 Tech: SPC	0				Prep Method: % Moisture:	E300P	
Analyst: SPC		Date Pre	p: 05.02.2020 14:	15	,	Wet Weight	
Seq Number: 3124967							
Parameter	Cas Number	Result	RL	Units	Analysis Dat	te Flag	Dil
Chloride 1	6887-00-6	12.7	1 98	ma/ka	05 02 2020 21.	.52	1

16887-00-6 12.7

4.98

mg/kg 05.02.2020 21:52

1

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# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id: AH-8 (4'-4.5') Lab Sample Id: 660363-030		Matrix: Date Colle	Soil ected: 04.30.2020 00:00		Date Received	1:05.01	.2020 09:	09
Analytical Method: Chloride by EPA 3 Tech: SPC	00				Prep Method: % Moisture:	E3001	Р	
Analyst:SPCSeq Number:3124968		Date Prep:	05.02.2020 14:32		Basis:	Wet V	Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	2180	24.9	mg/kg	05.02.2020 22	2:23		5



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Chlandel	16997.00 6	21.7	4.07		05 02 2020 22.	20	1
Parameter	Cas Number	Result	RL	Units	Analysis Dat	te Flag	Dil
Seq Number: 3124968							
Analyst: SPC		Date Prep	: 05.02.2020 14:32	2	Basis:	Wet Weight	
Tech: SPC					% Moisture:		
Analytical Method: Chlorid	le by EPA 300				Prep Method:	E300P	
Lab Sample Id: 660363-031		Date Colle	ected: 04.30.2020 00:00	)			
Sample Id: <b>AH-9 (0-1')</b>		Matrix:	Soil		Date Received:	05.01.2020 09	9:09

16887-00-6 21.7

4.97

mg/kg 05.02.2020 22:39

1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-9 (1'-1.5')           Lab Sample Id:         660363-032		Matrix: Date Colle	Soil ected: 04.30.2020 00:00		Date Received	1:05.01.	.2020 09:0	)9
Analytical Method: Chloride by EPA 3 Tech: SPC	300				Prep Method: % Moisture:	E300F	þ	
Analyst: SPC Seg Number: 3124968		Date Prep	: 05.02.2020 14:32		Basis:	Wet W	Veight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	7.54	4.96	mg/kg	05.02.2020 22	2:44		1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id: Lab Sample I	<b>AH-9</b> ( <b>2'-2.5'</b> ) d: 660363-033		Matrix: Date Col	Soil lected: 04.30.2020 00:0	00	Date Received:0.	5.01.2020 09	9:09
Analytical M	ethod: Chloride by EP	A 300				Prep Method: E	300P	
Tech:	SPC					% Moisture:		
Analyst:	SPC		Date Pre	p: 05.02.2020 14:3	32	Basis: W	Vet Weight	
Seq Number:	3124968							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	<4.96	4.96	mg/kg	05.02.2020 22:5	0 U	1

16887-00-6

4.96

05.02.2020 22:50

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# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id: <b>AH-9 (3'-3.5</b> Lab Sample Id: 660363-034	·	Matrix: Date Collec	Soil cted: 04.30.2020 00:00		Date Received:	05.01.2020 09	9:09
Analytical Method: Chlorid Tech: SPC	e by EPA 300				Prep Method: 1 % Moisture:	E300P	
Analyst: SPC		Date Prep:	05.02.2020 14:32		Basis:	Wet Weight	
Seq Number: 3124968 Parameter	Cas Number	Result	RL	Units	Analysis Dat	e Flag	Dil
Chloride	16887-00-6	6.24	5.02	mg/kg	05.02.2020 22::	0	1



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Chloride		16887-00-6	6.77	5.00	mg/kg	05.02.2020 23:	11	1
Parameter		Cas Number	Result	RL	Units	Analysis Dat	te Flag	Dil
Seq Number:	3124968							
Analyst:	SPC		Date Pre	p: 05.02.2020 14:3	2	Basis:	Wet Weight	
Tech:	SPC					% Moisture:		
Analytical Me	ethod: Chloride by EPA	A 300				Prep Method:	E300P	
Lab Sample Id	d: 660363-035		Date Col	lected: 04.30.2020 00:0	0			
Sample Id:	AH-10 (0-1')		Matrix:	Soil		Date Received:	05.01.2020 09	:09

16887-00-6 6.77

5.00



# **Certificate of Analytical Results 660363**

### Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-10 (1'-1.5')           Lab Sample Id:         660363-036		Matrix: Date Collecte	Soil ed: 04.30.2020 00:00		Date Received	1:05.01	.2020 09:0	9
Analytical Method: Chloride by EPA 300 Tech: SPC	)				Prep Method: % Moisture:	E300	Р	
Analyst:SPCSeq Number:3124968		Date Prep:	05.02.2020 14:32		Basis:	Wet V	Weight	
Parameter C	Cas Number R	Result R	L	Units	Analysis Da	ate	Flag	Dil
Chloride 165	887-00-6	16.8	4.96	mg/kg	05.02.2020 23	3:16		1



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-10 (2'-2.5')           Lab Sample Id:         660363-037		Matrix: Date Colle	Soil ected: 04.30.2020 00:00		Date Received	1:05.01	1.2020 09:	09
Analytical Method: Chloride by EPA 30 Tech: SPC Analyst: SPC	00	Date Prep:	05.02.2020 14:32		Prep Method: % Moisture: Basis:		P Weight	
Seq Number: 3124968 Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	20.4	5.01	mg/kg	05.02.2020 23	3:21		1



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id: <b>AH-11 (0-1')</b> Lab Sample Id: 660363-038		Matrix: Date Col	Soil lected: 04.30.2020 00:00	)	Date Received	1:05.01	.2020 09	:09
Analytical Method: Chloride by EPA 3 Tech: SPC	00				Prep Method: % Moisture:	E300	Р	
Analyst: SPC Seq Number: 3124968		Date Prep	p: 05.02.2020 14:32		Basis:	Wet '	Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	11.7	4.97	mg/kg	05.02.2020 23	3:26		1

16887-00-6 11.7



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-11 (1'-1.5')           Lab Sample Id:         660363-039		Matrix: Date Collected	Soil 04.30.2020 00:00		Date Received	:05.01.2	2020 09:0	9
Analytical Method: Chloride by EPA 300 Tech: SPC Analyst: SPC		Date Prep:	05.02.2020 14:32		Prep Method: % Moisture: Basis:	E300P Wet W		
Seq Number: 3124968		Dute Trep.					8	
Parameter C	as Number Re	esult RL		Units	Analysis Da	te	Flag	Dil
Chloride 168	387-00-6	<b>14.6</b> 4.	97	mg/kg	05.02.2020 23	:32		1



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-11 (2'-2.5')           Lab Sample Id:         660363-040			Soil 04.30.2020 00:00	Dat	e Received:(	05.01.2020 09:0	9
Analytical Method: Chloride by EPA 300 Tech: SPC Analyst: SPC			05 02 2020 14 22	% N	p Method: 1 Moisture:		
Seq Number: 3124968		2	05.02.2020 14:32	Bas		Wet Weight	
Parameter Ca	as Number Res	sult RL	τ	Jnits	Analysis Dat	e Flag	Dil
Chloride 168	87-00-6	15.2 4.9	9 n	ng/kg 05	5.02.2020 23:3	37	1

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## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-11 (3'-3.5')           Lab Sample Id:         660363-041		Matrix: Date Colle	Soil ected: 04.30.2020 00:00	I	Date Received	:05.01.2020 09	9:09
Analytical Method: Chloride by EPA Tech: SPC Analyst: SPC	300	Date Prep	: 05.02.2020 14:32		Prep Method: % Moisture: Basis:	E300P Wet Weight	
Seq Number: 3124968 Parameter	Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil
Chloride	16887-00-6	16.8	5.04	mg/kg	05.02.2020 23	:53	1



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-12 (0-1')           Lab Sample Id:         660363-042		Matrix: Date Colle	Soil ected: 04.30.2020 00:00		Date Received	1:05.01	.2020 09:	09
Analytical Method: Chloride by EPA Tech: SPC	300				Prep Method: % Moisture:	E300I	Р	
Analyst: SPC Sea Number: 3124968		Date Prep	: 05.02.2020 14:32		Basis:	Wet W	Veight	
Seq Number: 3124968 Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	12.1	5.05	mg/kg	05.02.2020 23	3:58		1



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-12 (1'-1.5')           Lab Sample Id:         660363-043		Matrix: Date Coll	Soil ected: 04.30.2020 00:00	)	Date Received	:05.01.2020 0	9:09
Analytical Method:Chloride by EPATech:SPCAnalyst:SPC22124068	300	Date Prep	o: 05.02.2020 14:32	2	Prep Method: % Moisture: Basis:	E300P Wet Weight	
Seq Number: 3124968 Parameter	Cas Number	Result	RL	Units	Analysis Da	ite Flag	Dil
Chloride	16887-00-6	14.4	5.03	mg/kg	05.03.2020 00	):14	1

Released to Imaging: 7/22/2021 11:35:28 AM



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id: Lab Sample Id	<b>AH-12 (2'-2.5')</b> d: 660363-044		Matrix: Date Col	Soil lected: 04.30	2020 00:00	Date Receive	d:05.01.2020	09:09
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA SPC SPC 3124968	300	Date Prep	p: 05.02	2020 14:32	Prep Method: % Moisture: Basis:	E300P Wet Weigh	t
Parameter	5127700	Cas Number	Result	RL	Unit	······································	0	Dil
Chloride		16887-00-6	17.4	4.99	mg/k	g 05.03.2020 0	0:19	1

Released to Imaging: 7/22/2021 11:35:28 AM



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-13 (0-1')           Lab Sample Id:         660363-045		Matrix: Date Coll	Soil ected: 04.30.2020 00:00	)	Date Received	1:05.01.20	020 09:09	)
Analytical Method: Chloride by EPA 3 Tech: SPC	300				Prep Method: % Moisture:	E300P		
Analyst:SPCSeq Number:3124968		Date Prep	b: 05.02.2020 14:32	2	Basis:	Wet We	ight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate F	lag	Dil
Chloride	16887-00-6	25.3	4.95	mg/kg	05.03.2020 00	):24		1

Released to Imaging: 7/22/2021 11:35:28 AM



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-13 (1'-1.5')           Lab Sample Id:         660363-046		Matrix: Date Colle	Soil ected: 04.30.2020 00:00		Date Received	1:05.01	.2020 09:	09
Analytical Method: Chloride by EPA 3 Tech: SPC	00				Prep Method: % Moisture:			
Analyst: SPC Seq Number: 3124968		Date Prep	: 05.02.2020 14:32		Basis:	wet	Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	16.6	5.05	mg/kg	05.03.2020 00	0:30		1



## **Certificate of Analytical Results 660363**

## Tetra Tech- Midland, Midland, TX

COG White Federal Com #1H (5.13.19)

Sample Id:         AH-14 (0-1')           Lab Sample Id:         660363-047		Matrix: Date Coll	Soil ected: 04.30.2020 00:00	)	Date Received	1:05.01.2	020 09:0	)9
Analytical Method: Chloride by EPA Tech: SPC	300				Prep Method: % Moisture:	E300P		
Analyst: SPC Seg Number: 3124968		Date Prep	o: 05.02.2020 14:32	2	Basis:	Wet We	eight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate I	lag	Dil
Chloride	16887-00-6	12.4	4.99	mg/kg	05.03.2020 00	):35		1



# **Flagging Criteria**

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.	ND Not Detected			
RL Reporting Limit				
MDL Method Detection Limit	SDL Sample De	tection Limit	LOD Limit of Detection	
PQL Practical Quantitation Limit	MQL Method Qu	antitation Limit	LOQ Limit of Quantitatio	n
DL Method Detection Limit				
NC Non-Calculable				
SMP Client Sample		BLK	Method Blank	
BKS/LCS Blank Spike/Laboratory	Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD Method Duplicate/Samp	ole Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate
+ NELAC certification not offered	l for this compound.			

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



### QC Summary 660363

# **Tetra Tech- Midland**

COG White Federal Com #1H (5.13.19)

<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>Chloride by EPA 30</b> 3124966 7702586-1-BLK	00		Matrix: nple Id:	Solid 7702586-1	I-BKS			ep Meth Date Pr D Sample	rep: 05.0	0P )2.2020 2586-1-BSD	
Parameter	MB	Spike		LCS	LCSD	LCSD	Limits	%RPD	RPD	Units	Analysis	Flag
Chloride	<b>Result</b> <5.00	Amount 250	Result 254	<b>%Rec</b> 102	Result 246	<b>%Rec</b> 98	90-110	3	Limit 20	mg/kg	Date 05.03.2020 12:13	
<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>Chloride by EPA 30</b> 3124967 7702587-1-BLK	00		Matrix: nple Id:	Solid 7702587-1	I-BKS			ep Meth Date Pr D Sample	ep: 05.0	0P )2.2020 2587-1-BSD	
Parameter	МВ	Spike	LCS	LCS	LCSD	LCSD	Limits	%RPD	RPD	Units	Analysis	Flag
Chloride	<b>Result</b> <5.00	Amount 250	Result 238	%Rec 95	Result 236	<b>%Rec</b> 94	90-110	1	Limit 20	mg/kg	Date 05.03.2020 12:18	8
Chionae	<5.00	250	250	)5	230	74	<i>y</i> 0 110	1	20	ing/kg		
<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>Chloride by EPA 30</b> 3124968 7702589-1-BLK	00		Matrix: nple Id:	Solid 7702589-1	I-BKS			rep Meth Date Pr D Sample	ep: 05.0	0P )2.2020 2589-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	234	94	236	94	90-110	1	20	mg/kg	05.02.2020 22:13	
<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>Chloride by EPA 30</b> 3124966 660323-018	00		Matrix: nple Id:	Soil 660323-0	18 S			ep Meth Date Pr D Sample	rep: 05.0	0P )2.2020 323-018 SD	
Seq Number:	3124966 660323-018 Parent	Spike	MS Sar MS	nple Id: MS	660323-03 MSD	MSD	Limits		Date Pr D Sample <b>RPD</b>	ep: 05.0	02.2020	Flag
Seq Number: Parent Sample Id:	3124966 660323-018		MS Sar	nple Id:	660323-0		<b>Limits</b> 90-110	MS	Date Pr D Sampl	ep: 05.0 e Id: 660	)2.2020 323-018 SD Analysis	Flag X
Seq Number: Parent Sample Id: <b>Parameter</b>	3124966 660323-018 Parent Result 76.5	Spike Amount 251	MS Sar MS Result 359	mple Id: MS %Rec 113 Matrix:	660323-0 MSD Result 353	<b>MSD</b> %Rec 110	90-110 Limits	MSI %RPD 2 Pr	Date Pr D Sample RPD Limit 20 rep Meth Date Pr	ep: 05.0 e Id: 660. Units mg/kg od: E30 ep: 05.0	02.2020 323-018 SD Analysis Date 05.02.2020 16:41	-
Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number:	3124966 660323-018 Parent Result 76.5 Chloride by EPA 30 3124966 660367-001 Parent Result 661 Chloride by EPA 30 3124967	Spike Amount 251 00 Spike Amount 249	MS Sar MS Result 359 MS Sar MS Result 855	mple Id: MS %Rec 113 Matrix: mple Id: MS %Rec 78 Matrix:	660323-02 MSD Result 353 Soil 660367-00 MSD Result 871 Soil	MSD %Rec 110 01 S MSD %Rec 84	90-110 Limits	MSI %RPD 2 Pr MSI %RPD 2 Pr	Date Pr D Sample RPD Limit 20 ep Meth Date Pr D Sample Limit 20 ep Meth Date Pr	ep: 05.0 e Id: 660 Units mg/kg od: E30 e Id: 660 Units mg/kg od: E30 ep: 05.0	22.2020 323-018 SD Analysis Date 05.02.2020 16:41 0P 02.2020 367-001 SD Analysis Date 05.02.2020 17:54	X Flag
Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number: Parent Sample Id:	3124966 660323-018 Parent Result 76.5 Chloride by EPA 30 3124966 660367-001 Parent Result 661 Chloride by EPA 30	Spike Amount 251 00 Spike Amount 249	MS Sar MS Result 359 MS Sar MS Result 855	nple Id: MS %Rec 113 Matrix: nple Id: MS %Rec 78 Matrix: nple Id:	660323-0. MSD Result 353 Soil 660367-00 MSD Result 871 Soil 660363-0	MSD %Rec 110 01 S %Rec 84	90-110 Limits	MSI %RPD 2 Pr MSI %RPD 2 Pr MSI	Date Pr D Sampl RPD Limit 20 rep Meth Date Pr D Sampl Emit 20 rep Meth Date Pr D Sampl	ep: 05.0 e Id: 660. Units mg/kg od: E30 ep: 05.0 e Id: 660. Units mg/kg od: E30 ep: 05.0 e Id: 660.	02.2020 323-018 SD Analysis Date 05.02.2020 16:41 0P 02.2020 367-001 SD Analysis Date 05.02.2020 17:54	X Flag X
Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number:	3124966 660323-018 Parent Result 76.5 Chloride by EPA 30 3124966 660367-001 Parent Result 661 Chloride by EPA 30 3124967 660363-010	Spike Amount 251 00 Spike Amount 249	MS Sar MS Result 359 MS Sar MS Result 855	mple Id: MS %Rec 113 Matrix: mple Id: MS %Rec 78 Matrix:	660323-02 MSD Result 353 Soil 660367-00 MSD Result 871 Soil	MSD %Rec 110 01 S MSD %Rec 84	90-110 Limits 90-110	MSI %RPD 2 Pr MSI %RPD 2 Pr	Date Pr D Sample RPD Limit 20 ep Meth Date Pr D Sample Limit 20 ep Meth Date Pr	ep: 05.0 e Id: 660 Units mg/kg od: E30 e Id: 660 Units mg/kg od: E30 ep: 05.0	22.2020 323-018 SD Analysis Date 05.02.2020 16:41 0P 02.2020 367-001 SD Analysis Date 05.02.2020 17:54	X Flag

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference  $\begin{array}{l} [D] = 100*(C-A) \ / \ B \\ RPD = 200* \ | \ (C-E) \ / \ (C+E) \ | \\ [D] = 100*(C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$ 

 $LCS = Laboratory \ Control \ Sample \\ A = Parent \ Result \\ C = MS/LCS \ Result \\ E = MSD/LCSD \ Result$ 

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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Final 1.000
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### QC Summary 660363

## Tetra Tech- Midland

COG White Federal Com #1H (5.13.19)

<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>Chloride by</b> 3124967 660363-020	,	0		Matrix: nple Id:	Soil 660363-02	20 S			ep Metho Date Pro D Sample	ep: 05.0	0P )2.2020 363-020 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		48.1	252	295	98	310	104	90-110	5	20	mg/kg	05.02.2020 20:48	
Analytical Method:	Chlorido h	- EDA 20	48.1 252 295 98 310 104 90-110 5 20 mg/kg 05.02.2020 20:48 PA 300 Prep Method: E300P Matrix: Soil Date Prep: 05.02.2020 MS Sample Id: 660363-030 S MSD Sample Id: 660363-030 SD										
Seq Number: Parent Sample Id:	3124968 660363-030	,	0				60 S			Date Pre	ep: 05.0	02.2020	
Seq Number:	3124968	,	Spike Amount				50 S MSD %Rec	Limits		Date Pre	ep: 05.0	02.2020	Flag
Seq Number: Parent Sample Id:	3124968	Parent	Spike	MS Sar MS	nple Id: MS	660363-03 MSD	MSD	<b>Limits</b> 90-110	MS	Date Pro D Sample <b>RPD</b>	ep: 05.0 Id: 660	)2.2020 363-030 SD Analysis	Flag

Analytical Method: Seq Number:	Chloride by EPA 30 3124968	0	1	Matrix:	Soil			Pı	ep Metho Date Pre		0P )2.2020	
Parent Sample Id:	660363-040				660363-04	40 S		MS		1	363-040 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	15.2	250	249	94	264	100	90-110	6	20	mg/kg	05.02.2020 23:42	

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference  $\begin{array}{l} [D] = 100*(C-A) \ / \ B \\ RPD = 200* \ | \ (C-E) \ / \ (C+E) \ | \\ [D] = 100*(C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$ 

 $LCS = Laboratory \ Control \ Sample \\ A = Parent \ Result \\ C = MS/LCS \ Result \\ E = MSD/LCSD \ Result$ 

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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Received by OC	<b>*</b>	5/1 reiniquisited by:		Relinquished by:			<u>M</u>									( LAB USE )	LAB #			Comments:	Receiving Laboratory.	Invoice to:	Project Location: (county, state)		Droipot Mamo	Client Name:	267 of 31 Analysis Re
		Date: Time:		Date: Time:	Juate: Time:		AH-3 (1'-1.5')	AH-3 (0-1')	AH-2 (2'-2.5') _	AH-2 (1'-1.5')	AH-2 (0-1')	AH-1 (2.5'-3')	AH-1 (2'-2.5')	AH-1 (1'-1.5')	AH-1 (0-1')		SAMPLE IDENTIFICATION			Xenco	COG- Attn: Ike Tavarez		Eddy County, New Mexico	White Federal Com #1H (5.13.19)	COG	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
ORIGINAL COPY		Received by:	r coorred by.		Pleasing by:	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	DATE	YEAR: 2020	SAMPLING		Sampler Signature:			Project #:		Site Manager:	2	
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		Date: Time:	Date: Time:		AH-6 (2'-2.5')	AH-6 (1'-1.5')	AH-6 (0-1')	AH-5 (3'-3.5')	AH-5 (2'-2.5')	AH-5 (1'-1.5')	AH-5 (0-1')	AH-4 (3'-3.5')	AH-4 (2'-2.5')	AH-4 (1'-1.5')		SAMPLE IDENTIFICATION			Xenco	COG- Attn: Ike Tavarez	Eddy County, New Mexico	White Federal Com #1H (5.13.19)	COG	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
ORIGINAL COPY		Received by:	Received by:	HON W	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	DATE	YEAR: 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:		
γqı		D	D	5/-	×	×	×	×	×	×	×	×	×	×	TIME WATEF SOIL	ρ.	MATRIX		Carlos		212C-1		Mike Carmona	900 West V Midlan Tel (4 Fax (4	
		Date: Time:	Date: Time:			×	×	×	×	×	×	×	×	×	HCL HNO ₃ ICE None		PRESERVATIVE METHOD		Carlos Tomlinson/Tony		212C-MD-02125		nona	900 West Wall Street, Ste 100 Midland,Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946	
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ELIVER	( ( (	ىر	ture												Total Met	tals A	lg As E								S
N II	Г		]	REMARKS:	<b>⊨</b>										TCLP Vol TCLP Sei RCI							v	ANALYSIS		
FEDEX U	Special Report Limite or TRRP Repo	Rush Charges Authorized	]RUSH: Same Day	STA											GC/MS V							specity			
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		miquisitica by:	Relinguished hv:	Helinquished by:	X	Relinquished by:											LAB USE ONLY	LAB #		Comments;	recently cappianty,	Projuing Laboratory.	(county, state)	Project Location:	Project Name:		Client Name.	Analysis Request
		Uate: lime:		Date: Time:	5	¹ Date: Time:	AH-8 (4'-4.5')	AH-8 (3'-3.5')	AH-8 (2'-2.5')	AH-8 (1'-1.5')	AH-8 (0-1')	AH-7 (2'-2.5')	AH-7 (1'-1.5')	AH-7 (0-1')	AH-6 (4'-4.5')	AH-6 (3'-3.5')		SAMPLE IDENTIFICATION			Xenco	COG- Attn: Ike Tavarez	Eddy County, New Mexico		White Federal Com #1H (5.13.19)	COG	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
ORIGINAL COPY		Received by:		Received by:	a la	Keder by	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	DATE TIME	YEAR: 2020	SAMPLING		Sampler Signature:			Project #:		Site Manager:		
		Date:		Date:	<u>u</u>	Date:	< >	× >	× :	× ;	×	×	×	×	×	×	WATER SOIL HCL		MATRIX		Carlos Tomli		212C-M			Mike Carmona	900 West Wall Street, Ste 1 Midland,Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946	
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		Date: Time:	Date: Ime:		Date: Time:	AH-11 (1'-1.5)	AH-11 (0-1')	AH-10 (2'-2.5')	AH-10 (1'-1.5')	AH-10 (0-1')	AH-9 (3'-3.5')	AH-9 (2'-2.5')	AH-9 (1'-7.5')			SAMPLE IDENTIFICATION				Xenco	COG- Attn: Ike Tavarez		Eddy County, New Mexico	White Federal Com #1H (5.13.19)	203	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
ORIGINAL COPY		Received by:	Received by:	1 DVV	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	4/30/2020	DATE		YEAR: 2020	SAMPLING		Sampler Signature:			Project #:		Site Manager:		
		Date:	Date:	S		×	×	×	×	×	×	×	×	×	WATI SOIL HCL	ĒR		MATRIX		Carlos To			212C-MD-02125		Mike Carmona	900 West Wall Street, Ste 1 Midland,Texas 79701 Tel (432) 682-4559 Fax (432) 682-3946	
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		Date: Time:	Date: Hille:		Date: Time:			AH-14 (1-1.5)	AH-13 (0-1')	AH-12 (2'-2.5')	AH-12 (1'-1.5')	AH-12 (0-1')	AH-11 (3'-3.5')		SAMPLE IDENTIFICATION			Xenco	COG- Attn: Ike Tavarez	Eddy County, New Mexico	White Federal Com #1H (5.13.19)	COG	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
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## **XENCO** Laboratories

## Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland	Acceptable Temperature Range: 0 - 6 degC
Date/ Time Received: 05.01.2020 09.09.00 AM	Air and Metal samples Acceptable Range: Ambient
Work Order #: 660363	Temperature Measuring device used : R9
Sample Recei	pt Checklist Comments
#1 *Temperature of cooler(s)?	1.3
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6*Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	Νο
#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)?	N/A
#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: Bill Tal Brianna Teel

Date: 05.01.2020

Checklist reviewed by: Jession Whamer

Jessica Kramer

Date: 05.01.2020



# **Analytical Report 664839**

for

**Tetra Tech- Midland** 

**Project Manager: Mike Carmona** 

White Federal 1H Flowline (5.13.19)

### 212C-MD-02125

### 06.22.2020

Collected By: Client



1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-34), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483) 212C-MD-02125 Mike Carmona

Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

## Certificate of Analysis Summary 664839

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Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

 Date Received in Lab:
 Thu 06.18.2020 14:21

 Report Date:
 06.22.2020 14:09

Project Manager: Jessica Kramer

	Lab Id:	664839-0	01	664839-00	02	664839-0	03	664839-00	04	664839-0	05	664839-00	06
Analysis Requested	Field Id:	AH-2 (0-1	)	AH-2 (1'-1.	5')	AH-2 (2-2.5	')	AH-4 (0-1')	)	AH-4 (1'-1.5	5')	AH-4 (2'-2.5	)
Analysis Requested	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	06.18.2020	00:00	06.18.2020 (	00:00	06.18.2020 (	00:00	06.18.2020 (	00:00	06.18.2020	00:00	06.18.2020 0	00:00
Chloride by EPA 300	Extracted:	06.20.2020	14:00	06.20.2020	14:00	06.20.2020	14:25	06.20.2020	14:25	06.20.2020	14:25	06.20.2020 1	14:25
	Analyzed:	06.20.2020	16:47	06.20.2020	16:52	06.20.2020	17:38	06.20.2020	17:23	06.20.2020	17:43	06.20.2020 1	17:48
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		720	4.99	4180	24.8	4210	25.1	58.3 X	5.00	30.1	5.05	58.9	5.05

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.

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fession kenner

Jessica Kramer Project Manager

Page 1 of 21

212C-MD-02125 Mike Carmona

Eddy County, New Mexico



**Project Id:** 

**Project Location:** 

**Contact:** 

## Certificate of Analysis Summary 664839

Tetra Tech- Midland, Midland, TX

**Project Name: White Federal 1H Flowline (5.13.19)** 

Date Received in Lab: Thu 06.18.2020 14:21

**Report Date:** 06.22.2020 14:09

Project Manager: Jessica Kramer

	Lab Id:	664839-0	07	664839-0	08	664839-0	09	664839-0	10	664839-01	1	
Analysis Requested	Field Id:	Horizontal NW-	1 (0-1')	Horizontal NW-	2 (0-1')	Horizontal NW-6	(0-1')	Horizontal SE-1	(0-1')	Horizontal SE-4 (	0-1')	
Analysis Requested	Depth:											
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		
	Sampled:	06.18.2020 (	00:00	06.18.2020	00:00	06.18.2020 (	00:00	06.18.2020	00:00	06.18.2020 0	00:00	
Chloride by EPA 300	Extracted:	06.20.2020	14:25	06.20.2020	14:25	06.20.2020	14:25	06.20.2020	14:25	06.20.2020 1	4:25	
	Analyzed:	06.20.2020	17:53	06.20.2020	18:08	06.20.2020	18:13	06.20.2020	18:18	06.20.2020 1	8:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		4480	24.9	141	5.00	239	4.95	3340	25.2	13.7 X	5.01	

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.

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fession Vermer

Jessica Kramer Project Manager

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06.22.2020

Project Manager: **Mike Carmona Tetra Tech- Midland** 901 West Wall ST Midland, TX 79701

Reference: XENCO Report No(s): **664839 White Federal 1H Flowline (5.13.19)** Project Address: Eddy County, New Mexico

#### Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 664839. 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. 664839 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,

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Jessica Kramer Project Manager

A Small Business and Minority Company

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### Sample Id

AH-2 (0-1')
AH-2 (1'-1.5')
AH-2 (2-2.5')
AH-4 (0-1')
AH-4 (1'-1.5')
AH-4 (2'-2.5')
Horizontal NW-1 (0-1')
Horizontal NW-2 (0-1')
Horizontal NW-6 (0-1')
Horizontal SE-1 (0-1')
Horizontal SE-4 (0-1')

## Sample Cross Reference 664839

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	06.18.2020 00:00		664839-001
S	06.18.2020 00:00		664839-002
S	06.18.2020 00:00		664839-003
S	06.18.2020 00:00		664839-004
S	06.18.2020 00:00		664839-005
S	06.18.2020 00:00		664839-006
S	06.18.2020 00:00		664839-007
S	06.18.2020 00:00		664839-008
S	06.18.2020 00:00		664839-009
S	06.18.2020 00:00		664839-010
S	06.18.2020 00:00		664839-011



Client Name: Tetra Tech- Midland Project Name: White Federal 1H Flowline (5.13.19)

Project ID: 212C-MD-02125 Work Order Number(s): 664839 
 Report Date:
 06.22.2020

 Date Received:
 06.18.2020

#### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

#### Analytical non conformances and comments:

Batch: LBA-3129554 Chloride by EPA 300

Lab Sample ID 664839-011 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 664839-003, -004, -005, -006, -007, -008, -009, -010, -011.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Chloride	16887-00-6	720	4.99	mg/kg	06.20.2020 16	5:47	1
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil
Seq Number: 3129551							
Analyst: CHE		Date Prep	o: 06.20.2020 14	4:00	Basis:	Wet Weight	
Tech: CHE					% Moisture:		
Analytical Method: Chloride by EPA 3	00				Prep Method:	E300P	
Lab Sample Id: 664839-001		Date Collected: 06.18.2020 00:00					
Sample Id: <b>AH-2 (0-1')</b>		Matrix:	Soil		Date Received	1:06.18.2020 1	4:21



## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:         AH-2 (1'-1.5')           Lab Sample Id:         664839-002		Matrix: Date Coll	Soil ected: 06.18.2020 00:00		Date Received	1:06.18	3.2020 14:	21
Analytical Method: Chloride by EPA 3 Tech: CHE Analyst: CHE Seq Number: 3129551	00	Date Prep	: 06.20.2020 14:00		Prep Method: % Moisture: Basis:		P Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride	16887-00-6	4180	24.8	mg/kg	06.20.2020 10	6:52		5

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## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Chloride		16887-00-6	4210		5 1	ma/ka			Fidg	-
Parameter		Cas Number	Result	RL		Units	Analysis Da	ate	Flag	Dil
Seq Number:	3129554									
Analyst:	CHE		Date Pre	ep:	06.20.2020 14:25		Basis:	Wet	Weight	
Tech:	CHE						% Moisture:			
Analytical Me	ethod: Chloride by El	PA 300					Prep Method:	E300	)P	
Lab Sample I	d: 664839-003	Date Co	ollected	1:06.18.2020 00:00						
Sample Id:	AH-2 (2-2.5')		Matrix:		Soil		Date Received	1:06.1	8.2020 14	:21

16887-00-6 4210

25.1

mg/kg

06.20.2020 17:38

5

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Released to Imaging: 7/22/2021 11:35:28 AM



## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: <b>AH-4 (0-1')</b> Lab Sample Id: 664839-004		Matrix: Date Col	Soil lected: 06.18.2020 00:00	)	Date Received:06.18.2020 14:2			
Analytical Method: Chloride by EPA Tech: CHE	x 300				Prep Method: F % Moisture:	E300P		
Analyst: CHE		Date Pre	p: 06.20.2020 14:25	5	Basis: V	Wet Weight		
Seq Number: 3129554								
Parameter	Cas Number	Result	RL	Units	Analysis Date	e Flag	Dil	
Chloride	16887-00-6	58.3	5.00	mg/kg	06.20.2020 17:2	23 X	1	

16887-00-6 58.3

5.00

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## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Chlowida	16997 00 6	20.1	5.05	ma/Ira	06 20 2020 17.4	2	1
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Seq Number: 3129554							
Analyst: CHE		Date Prep	: 06.20.2020 14:2	5	Basis: W	Vet Weight	
Tech: CHE					% Moisture:		
Analytical Method: Chloride by E	PA 300				Prep Method: E	300P	
ab Sample Id: 664839-005       Date Collected: 06.18.2020 00:00							
Sample Id: AH-4 (1'-1.5')		Matrix:	Soil		Date Received:0	6.18.2020 14	4:21

16887-00-6 30.1

5.05

mg/kg 06.20.2020 17:43

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Released to Imaging: 7/22/2021 11:35:28 AM



## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: <b>AH-4 (2'-2.5'</b> ) Lab Sample Id: 664839-006		Matrix: Date Colle	Soil ected: 06.18.2020 00:00	)	Date Received	:06.18.2020 14	4:21
Analytical Method: Chloride by EPA Tech: CHE	300				Prep Method: % Moisture:	E300P	
Analyst: CHE Seq Number: 3129554		Date Prep	06.20.2020 14:25		Basis:	Wet Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ite Flag	Dil
Chloride	16887-00-6	58.9	5.05	mg/kg	06.20.2020 17	:48	1



## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Horizontal NW-1 (0 d: 664839-007	-1')	Matrix:	Soil lected: 06.18.2020 00:0	0	Date Received:0	6.18.2020 14	:21
-	ethod: Chloride by EPA CHE CHE	x 300	Date Co		-	Prep Method: E % Moisture: Basis: V	E300P Wet Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Date	e Flag	Dil
Chloride		16887-00-6	4480	24.9	mg/kg	06.20.2020 17:5	i3	5

16887-00-6

24.9

Released to Imaging: 7/22/2021 11:35:28 AM

## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Horizontal NW-2	(0-1')	Matrix:	Soil		Date Receive	d:06.18.2	2020 14:	21
Lab Sample Id: 664839-008		Date Collec	ted: 06.18.2020 00:00					
Analytical Method: Chloride by E	EPA 300				Prep Method:	E300P		
Tech: CHE					% Moisture:			
Analyst: CHE		Date Prep:	06.20.2020 14:25		Basis:	Wet W	eight	
Seq Number: 3129554								
Parameter	Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil

16887-00-6 **141** 

5.00

mg/kg 06.20.2020 18:08

1



## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Parameter		Cas Number	Result	RL		Units	Analysis D	ate	Flag	Dil
Seq Number:	3129554									
Analyst:	CHE		Date Pre	ep:	06.20.2020 14:25		Basis:	Wet W	Veight	
Tech:	CHE						% Moisture:			
Analytical Me	ethod: Chloride by EPA	300					Prep Method:	E300I	P	
Lab Sample Io	d: 664839-009		Date Co	llected	1:06.18.2020 00:00					
Sample Id:	Horizontal NW-6 (0-1	')	Matrix:		Soil		Date Received	1:06.18	.2020 14:2	21

239

16887-00-6

4.95

5

06.20.2020 18:13

mg/kg

1

.

Released to Imaging: 7/22/2021 11:35:28 AM



## **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id:	Horizontal SE-1 (0-1')		Matrix:		Soil		Date Received	1:06.1	8.2020 14:	21
Lab Sample Io	d: 664839-010		Date Co	ollected	1:06.18.2020 00:00					
Analytical Me	ethod: Chloride by EPA	300					Prep Method:	E300	)P	
Tech:	CHE						% Moisture:			
Analyst:	CHE		Date Pr	ep:	06.20.2020 14:25		Basis:	Wet	Weight	
Seq Number:	3129554									
Parameter		Cas Number	Result	RL		Units	Analysis D	ate	Flag	Dil

Chloride

16887-00-6 **3340** 

25.2

mg/kg 06.20.2020 18:18

5



# **Certificate of Analytical Results 664839**

## Tetra Tech- Midland, Midland, TX

White Federal 1H Flowline (5.13.19)

Sample Id: Lab Sample Id	Horizontal SE-4 (0-1')		Matrix: Date Col	lected	Soil l: 06.18.2020 00:00		Date Received	1:06.18	3.2020 14:2	21
	thod: Chloride by EPA 3	300	Dute Cor	100100			Prep Method:	E300	Р	
Tech:	CHE						% Moisture:			
Analyst:	CHE		Date Prep	p:	06.20.2020 14:25		Basis:	Wet V	Weight	
Seq Number:	3129554									
Parameter		Cas Number	Result	RL		Units	Analysis Da	ate	Flag	Dil

Chloride

16887-00-6 **13.7** 

5.01

mg/kg 06.20.20

06.20.2020 18:33

Х

1

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Released to Imaging: 7/22/2021 11:35:28 AM



# **Flagging Criteria**

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.	ND Not Detected			
RL Reporting Limit				
MDL Method Detection Limit	SDL Sample De	tection Limit	LOD Limit of Detection	
PQL Practical Quantitation Limit	MQL Method Qu	antitation Limit	LOQ Limit of Quantitatio	n
DL Method Detection Limit				
NC Non-Calculable				
SMP Client Sample		BLK	Method Blank	
BKS/LCS Blank Spike/Laboratory	Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory Control Sample Duplicate
MD/SD Method Duplicate/Samp	ole Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate
+ NELAC certification not offered	for this compound.			

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



# Tetra Tech- Midland

White Federal 1H Flowline (5.13.19)

<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>Chloride by</b> 3129551 7705870-1- <b>F</b>		00		Matrix: nple Id:	Solid 7705870-	1-BKS			ep Meth Date Pr D Sample	rep: 06.2	0P 20.2020 5870-1-BSD	
Parameter		MB	Spike	LCS Result		LCSD	LCSD	Limits	%RPD	RPD	Units	Analysis Date	Flag
Chloride		<b>Result</b> <5.00	Amount 250	<b>Result</b> 256	<b>%Rec</b> 102	Result 261	<b>%Rec</b> 104	90-110	2	Limit 20	mg/kg	06.20.2020 14:25	
<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>Chloride by</b> 3129554 7705871-1- <b>F</b>		00		Matrix:	Solid 7705871-	1-BKS			ep Meth Date Pr	rep: 06.2	0P 20.2020 5871-1-BSD	
-	7705071-1-1	MB	Spike	LCS	LCS	LCSD	LCSD	Limits	%RPD	RPD	Units	Analysis	Flag
<b>Parameter</b> Chloride		<b>Result</b> <5.00	Amount 250	Result 258	%Rec 103	Result 254	%Rec 102	90-110	2	Limit 20	mg/kg	<b>Date</b> 06.20.2020 17:12	riag
Chionde		<5.00	230	238	105	234	102	90-110	2	20	mg/kg	00.20.2020 17.12	
<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>Chloride by</b> 3129551 664816-008	y EPA 30	00		Matrix: nple Id:	Soil 664816-00	08 S			ep Meth Date Pr D Sample	rep: 06.2	0P 20.2020 816-008 SD	
Parameter		Parent	Spike	MS	MS	MSD	MSD	Limits	%RPD	RPD	Units	Analysis	Flag
Chloride		<b>Result</b> 15.0	Amount 249	Result 263	<b>%Rec</b> 100	Result 265	<b>%Rec</b> 100	90-110	1	Limit 20	mg/kg	<b>Date</b> 06.20.2020 14:41	
Analytical Method: Seq Number:	Chloride by 3129551	v EPA 3(	00		Matrix:	Soil			Pr	ep Meth Date Pr		0P 20.2020	
-	-	y EPA 30	00			Soil 664816-0	18 S			Date Pr D Sampl	rep: 06.2		
Seq Number:	3129551	7 EPA 30 Parent Result	00 Spike Amount				18 S MSD %Rec	Limits		Date Pr	rep: 06.2	20.2020	Flag
Seq Number: Parent Sample Id:	3129551	Parent	Spike	MS Sar MS	nple Id: MS	664816-0 <b>MSD</b>	MSD	<b>Limits</b> 90-110	MS	Date Pr D Sample <b>RPD</b>	rep: 06.2 e Id: 664	20.2020 816-018 SD Analysis	Flag
Seq Number: Parent Sample Id: Parameter Chloride Analytical Method:	3129551 664816-018 Chloride by	Parent Result 9.91	<b>Spike</b> <b>Amount</b> 250	MS Sar MS Result 268	mple Id: MS %Rec 103	664816-0 MSD Result 259	MSD %Rec		MSI %RPD 3	Date Pr D Sample <b>RPD</b> Limit 20	ep: 06.2 e Id: 6643 Units mg/kg od: E30	20.2020 816-018 SD Analysis Date 06.20.2020 15:51	Flag
Seq Number: Parent Sample Id: <b>Parameter</b> Chloride	3129551 664816-018	Parent Result 9.91	<b>Spike</b> <b>Amount</b> 250	MS Sar MS Result 268	mple Id: MS %Rec 103 Matrix:	664816-0 MSD Result 259	<b>MSD</b> %Rec 100		MSI <b>%RPD</b> 3 Pr	Date Pr D Sample RPD Limit 20 rep Meth Date Pr	ep: 06.2 e Id: 6643 Units mg/kg od: E30 ep: 06.2	20.2020 816-018 SD Analysis Date 06.20.2020 15:51	Flag
Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number:	3129551 664816-018 Chloride by 3129554	Parent Result 9.91 PEPA 30 Parent	Spike Amount 250 00 Spike	MS Sar MS Result 268 MS Sar MS	nple Id: MS %Rec 103 Matrix: nple Id: MS	664816-0 MSD Result 259 Soil 664839-00 MSD	<b>MSD</b> %Rec 100		MSI <b>%RPD</b> 3 Pr	Date Pr D Sampl RPD Limit 20 rep Meth Date Pr D Sampl RPD	ep: 06.2 e Id: 6643 Units mg/kg od: E30 ep: 06.2	20.2020 816-018 SD Analysis Date 06.20.2020 15:51 0P 20.2020 839-004 SD Analysis	Flag Flag
Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number: Parent Sample Id:	3129551 664816-018 Chloride by 3129554	Parent Result 9.91 7 EPA 30	Spike Amount 250	MS Sar MS Result 268 MS Sar	nple Id: MS %Rec 103 Matrix: nple Id:	664816-0 MSD Result 259 Soil 664839-00	MSD %Rec 100	90-110	MSI %RPD 3 Pr MSI	Date Pr D Sampl RPD Limit 20 rep Meth Date Pr D Sampl	ep: 06.2 e Id: 664: Units mg/kg od: E30 ep: 06.2 e Id: 664:	20.2020 816-018 SD Analysis Date 06.20.2020 15:51 0P 20.2020 839-004 SD	U
Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number: Parent Sample Id: Parameter	3129551 664816-018 Chloride by 3129554 664839-004	Parent Result 9.91 EPA 3 Parent Result 58.3	Spike Amount 250 00 Spike Amount 250	MS Sar MS Result 268 MS Sar MS Result 337	nple Id: MS %Rec 103 Matrix: nple Id: MS %Rec 111 Matrix:	664816-0 MSD Result 259 Soil 664839-00 MSD Result 327	MSD %Rec 100 04 S MSD %Rec 107	90-110 Limits	MSI %RPD 3 Pr MSI %RPD 3 Pr	Date Pr D Sampl RPD Limit 20 rep Meth Date Pr D Sampl Limit 20 rep Meth Date Pr	ep: 06.2 e Id: 664 Units mg/kg od: E30 e Id: 664 Units mg/kg od: E30 ep: 06.2	20.2020 816-018 SD Analysis Date 06.20.2020 15:51 0P 20.2020 839-004 SD Analysis Date 06.20.2020 17:28	Flag
Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number:	3129551 664816-018 Chloride by 3129554 664839-004 Chloride by 3129554	Parent Result 9.91 Parent Result 58.3 PEPA 3( Parent	Spike Amount 250 00 Spike Amount 250 00 Spike	MS Sar MS Result 268 MS Sar MS Result 337 MS Sar MS Sar	nple Id: MS %Rec 103 Matrix: nple Id: MS %Rec 111 Matrix: nple Id: MS	664816-0 MSD Result 259 Soil 664839-00 MSD Result 327 Soil 664839-0 MSD	MSD %Rec 100 04 S MSD %Rec 107	90-110 Limits	MSI %RPD 3 Pr MSI %RPD 3 Pr	Date Pr D Sampl RPD Limit 20 rep Meth Date Pr D Sampl RPD Limit 20 rep Meth Date Pr D Sampl RPD Sampl RPD	ep: 06.2 e Id: 664 Units mg/kg od: E30 e Id: 664 Units mg/kg od: E30 ep: 06.2	20.2020 816-018 SD Analysis Date 06.20.2020 15:51 0P 20.2020 839-004 SD Analysis Date 06.20.2020 17:28	Flag
Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number: Parent Sample Id: Parameter Chloride Analytical Method: Seq Number: Parent Sample Id:	3129551 664816-018 Chloride by 3129554 664839-004 Chloride by 3129554	Parent Result 9.91 FEPA 30 Parent Result 58.3 FEPA 30	Spike Amount 250 00 Spike Amount 250	MS Sar MS Result 268 MS Sar MS Result 337	nple Id: MS %Rec 103 Matrix: nple Id: MS %Rec 111 Matrix: nple Id:	664816-0 MSD Result 259 Soil 664839-00 MSD Result 327 Soil 664839-0	MSD %Rec 100 04 S MSD %Rec 107	90-110 Limits 90-110 Limits	MSI %RPD 3 Pr MSI %RPD 3 Pr MSI	Date Pr D Sampl RPD Limit 20 rep Meth Date Pr D Sampl Eimit 20 rep Meth Date Pr D Sampl	ep: 06.2 e Id: 6643 Units mg/kg od: E30 ep: 06.2 e Id: 6643 Units mg/kg od: E30 ep: 06.2 e Id: 6643	20.2020 816-018 SD Analysis Date 06.20.2020 15:51 0P 20.2020 839-004 SD Analysis Date 06.20.2020 17:28	Flag X

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference  $\begin{array}{l} [D] = 100*(C-A) \ / \ B \\ RPD = 200* \ | \ (C-E) \ / \ (C+E) \ | \\ [D] = 100*(C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$ 

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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Page 19 of 21

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Final 1.000
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COC         Conversion Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pression Pr		CD: Selinquished by:	4/202	Belinguished by:	Aelinquished by:	3 11	7/									( LAB USE )	LAB #			Commante:	Invoice to:	(county, state)		Project Name	Page 29	Analysis Reques
Mike Carmona     Mike Carmona       Mike Carmona     reservoire       Mike Carmona						h		6-0	(q	AH-4 (2'-2.5')	AH-4 (1'-1.5')	AH-4 (0-1')	AH-2 (2'-2.5')	AH-2 (1'-1.5')	AH-2 (0-1')		SAMPLE IDENTIFICATION			Xenco	COG Ike Tavarez	Eddy County, New Mexico		COG	Tetra Tech, Inc.	Analysis Request of Chain of Custody Record
Mike Carmona     Mike Carmona       Mike Carmona     reservoire       Mike Carmona	ORIGINAL COP	Received by:	Heceived by:	MB	6/18/2020 Received by	6/18/2020	6/18/2020	6/18/2020	6/18/2020	6/18/2020	6/18/2020	6/18/2020	6/18/2020	6/18/2020	6/18/2020		YEAR, 2020	SAMPLING		Sampler Signature:		Project #:		Site Manager:		
Analysis     Analysis     Rependence       1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1	×	Date	. Date	$(0)_{12}$	· [	×	×	×	×	×	×	×	×	×	×	WATE SOIL	R	MATRIX		Mike Ca		212C-M		Mike Carmo	900 West Wa Midland, Tel (432 Fax (432	
Page 10         AMAYSIS REQUEST         CIFICE OF SPECIFY MEthod No.)         CIFICE Point Method No.)         CIFICE OF Specify Method No.         CIFICE NUMERING         Special		Tim	Tim	1		×	×	×	×	×	×	×	×	×		HNO ₃ ICE None				rmona		D-02125		ona	lll Street, Ste 100 Texas 79701 2) 682-4559 2) 682-3946	
ANALYSIS REQUEST Circle or Specify Method No.) PAH 8270C ITPH 8015M (GRO - DRO - ORO - MRO.) PAH 8270C ITPH 8015M (GRO - DRO - ORO - MRO.) PAH 8270C ITPH 8015M (GRO - DRO - ORO - MRO.) PAH 8270C ITOLP Metals Ag As Ba Cd Cr Pb Se Hg ITOLP Metals Ag As Ba Cd Cr Pb Se Hg ITOLP Semi Volatiles REMARKS: ITOLP Semi Volatiles ITOLP Semi Volatiles ITOLP Semi Volatiles ITOLP Semi Volatiles ITOLP Semi Volatiles ITOLP Semi Volatiles ITOLP SEMI VOL SET ITOL ITOLP Semi Volatiles ITOLP Semi Vola				ð						_					z	FILTER	ED ()	(/N)								
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Tracking #:			] 🗋									4					emi Vo	olatiles						NAL		
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TH     Chloride     Sulfate     TDS       TH     Chloride     Sulfate     TDS       Coloride     General Water Chemistry (see attached list)       Anion/Cation Balance       TH       TO       TD       TO       TD       TO       TO <td< td=""><td>UPS</td><td>harge I Repo</td><td>San</td><td>AND</td><td></td><td></td><td>+</td><td>_</td><td>_</td><td>-</td><td></td><td>-</td><td>_</td><td>4</td><td>_</td><td></td><td></td><td></td><td>270C/625</td><td></td><td></td><td></td><td></td><td>R</td><td></td><td>2</td></td<>	UPS	harge I Repo	San	AND			+	_	_	-		-	_	4	_				270C/625					R		2
THP     A     Chloride     Sulfate     TDS       Anion/Cation     General Water     Chemistry (see attached list)     J       Anion/Cation     Balance       J     J     TPH 8015R       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J	Trac	es Au ort Lin	ne Da	IAR											Ī	NORM								Э Е		
THP     A     Chloride     Sulfate     TDS       Anion/Cation     General Water     Chemistry (see attached list)     J       Anion/Cation     Balance       J     J     TPH 8015R       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J       J     J     J	ding #:	nits or		0	$\mathbf{x}$	×	×	×	$\mathbf{x}$	$\frac{1}{2}$	$\mathbf{x}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$			besto	s)					og	T		Pag
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		P Rep	48 hr		$\vdash$	$\rightarrow$		-+	-+	+		+	+	-						e attac	hed list	)	_``	·		
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### **XENCO** Laboratories

### Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland	Acceptable Temperature Range: 0 - 6 degC				
Date/ Time Received: 06.18.2020 02.21.00 PM	Air and Metal samples Acceptable Range: Ambient				
Work Order #: 664839	Temperature Measuring device used : IR-8				
Sample Recei	pt Checklist Comments				
#1 *Temperature of cooler(s)?	2.2				
#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)?	N/A				
#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: Bitter Tal

Date: 06.18.2020

Checklist reviewed by: Jession Whamer

Jessica Kramer

Date: 06.19.2020

eurofins Environment Testing

**Project Location:** 

Project Id:

**Contact:** 

### Xenco

212C-MD-02155

Mike Carmona

Eddy County

**Certificate of Analysis Summary 670695** 

Tetra Tech- Midland, Midland, TX

**Project Name: White Fed Com #1 H(5.13.19)** 

Date Received in Lab: Fri 08.21.2020 10:55 **Report Date:** 08.24.2020 08:15

Project Manager: Jessica Kramer

	Lab Id:	670695-00	)1	670695-00	)2	670695-00	03	670695-00	)4	670695-0	05	670695-00	06
Analysis Requested	Field Id:	AH#2 (0-1	')	AH#2 (1-1	.5')	AH#8 (0-1'	)	AH#8 (1-1.5	j')	AH#8 (2-2.5')		AH#8 (3-3.5	5')
Analysis Requested	Depth:	0-1 ft		1-1.5 ft	1-1.5 ft			1-1.5 ft		2-2.5 ft		3-3.5 ft	
	Matrix:	SOIL	SOIL			SOIL		SOIL		SOIL		SOIL	
	Sampled:	08.19.2020 (	00:00	08.19.2020 0	00:00	08.19.2020 (	00:00	08.19.2020 (	00:00	08.19.2020	00:00	08.19.2020 0	00:00
Inorganic Anions by EPA 300/300.1	Extracted:	08.21.2020	3:00	08.21.2020 13:00		08.21.2020	13:00	08.21.2020 1	3:00	08.21.2020	13:00	08.21.2020 1	13:00
	Analyzed:	08.21.2020	08.21.2020 14:22		4:39	08.21.2020	14:45	08.21.2020 1	4:50	08.21.2020	14:56	08.21.2020 1	15:13
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		17600	200	24600	200	38.3	9.96	20.3	9.98	16.1	10.0	78.7	10.0

BRL - Below Reporting Limit

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

Jession Vramer

Page 1 of 19

eurofins Environment Testing

Project Id:

**Project Location:** 

**Contact:** 

Xenco

212C-MD-02155

Mike Carmona

Eddy County

**Certificate of Analysis Summary 670695** 

Tetra Tech- Midland, Midland, TX

**Project Name: White Fed Com #1 H(5.13.19)** 

Date Received in Lab: Fri 08.21.2020 10:55

**Report Date:** 08.24.2020 08:15

Project Manager: Jessica Kramer

	Lab Id:	670695-0	07	670695-00	08	670695-00	)9			
Analysis Requested	Field Id:	AH#8 (4-4	.5')	Horizonal - I	NW1	Horizontal- S	E1			
Analysis Requested	Depth:	4-4.5 ft								
	Matrix:	SOIL		SOIL		SOIL				
	Sampled:	08.19.2020 (	00:00	08.19.2020 (	00:00	08.19.2020 (	00:00			
Inorganic Anions by EPA 300/300.1	Extracted:	08.21.2020	13:00	08.21.2020	13:00	08.21.2020	3:00			
	Analyzed:	08.21.2020	15:18	08.21.2020	15:24	08.21.2020	5:29			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Chloride		2560	49.8	3520	49.8	856	9.98			

BRL - Below Reporting Limit

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

Jession Vramer

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# **Analytical Report 670695**

for

# **Tetra Tech- Midland**

**Project Manager: Mike Carmona** 

White Fed Com #1 H(5.13.19)

### 212C-MD-02155

### 08.24.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)

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08.24.2020

Project Manager: **Mike Carmona Tetra Tech- Midland** 901 West Wall ST Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): 670695 White Fed Com #1 H(5.13.19) Project Address: Eddy County

### Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 670695. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 670695 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

fession kenner

Jessica Kramer Project Manager

A Small Business and Minority Company

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

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### Sample Id

AH#2 (0-1')	
AH#2 (1-1.5')	
AH#8 (0-1')	
AH#8 (1-1.5')	
AH#8 (2-2.5')	
AH#8 (3-3.5')	
AH#8 (4-4.5')	
Horizonal - NW1	
Horizontal- SE1	

## Sample Cross Reference 670695

### Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	08.19.2020 00:00	0 - 1 ft	670695-001
S	08.19.2020 00:00	1 - 1.5 ft	670695-002
S	08.19.2020 00:00	0 - 1 ft	670695-003
S	08.19.2020 00:00	1 - 1.5 ft	670695-004
S	08.19.2020 00:00	2 - 2.5 ft	670695-005
S	08.19.2020 00:00	3 - 3.5 ft	670695-006
S	08.19.2020 00:00	4 - 4.5 ft	670695-007
S	08.19.2020 00:00		670695-008
S	08.19.2020 00:00		670695-009

Environment Testing Xenco

### **CASE NARRATIVE**

Client Name: Tetra Tech- Midland Project Name: White Fed Com #1 H(5.13.19)

Project ID: 212C-MD-02155 Work Order Number(s): 670695 
 Report Date:
 08.24.2020

 Date Received:
 08.21.2020

### Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

## **Certificate of Analytical Results 670695**

### Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Sample Id: Lab Sample Id	<b>AH#2 (0-1')</b> d: 670695-001		Matrix: Date Colle	Soil ected: 08.19.2020 00:00		Date Received Sample Depth	10:55	
Analytical Me Tech:	thod: Inorganic Anions MAB	by EPA 300/300.1				Prep Method: % Moisture:	E300P	
Analyst: Seq Number:	MAB 3135303		Date Prep	: 08.21.2020 13:00		Basis:	Wet Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil
Chloride		16887-00-6	17600	200	mg/kg	08.21.2020 14	4:22	20

#### Environment Testin Xenco

### Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Sample Id: Lab Sample Id:	<b>AH#2 (1-1.5')</b> 670695-002		Matrix: Date Coll	Soil ected: 08.19.202	0 00:00	Date Received:08.21.2020 10:55 Sample Depth: 1 - 1.5 ft			
Tech: Analyst:	hod: Inorganic Anions MAB MAB 3135303	by EPA 300/300.1	Date Prep	: 08.21.202	0 13:00	Prep Method: % Moisture: Basis:	E300P Wet Weight		
Parameter		Cas Number	Result	RL	Units	Analysis Da	nte Flag	Dil	
Chloride		16887-00-6	24600	200	mg/kg	08.21.2020 14	1:39	20	

## **Certificate of Analytical Results 670695**

### Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Sample Id: Lab Sample Id:	<b>AH#8 (0-1')</b> 670695-003		Matrix: Date Colle	Soil ected: 08.19.2020 00:00	)	Date Received Sample Depth			55
•	od: Inorganic Anions	by EPA 300/300.1				Prep Method: % Moisture:	E300	P	
	MAB		Date Prep	08.21.2020 13:00	)	Basis:	Wet	Weight	
Seq Number:	3135303								
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	38.3	9.96	mg/kg	08.21.2020 14	4:45		1

#### Environment Testin Xenco

### Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Sample Id: Lab Sample Id	<b>AH#8 (1-1.5')</b> d: 670695-004		Matrix: Date Coll	Soil ected: 08.19.2020 00:0	00	Date Received Sample Depth			55
	ethod: Inorganic Anions	s by EPA 300/300.1			~ ~	Prep Method:			
Tech:	MAB					% Moisture:			
Analyst:	MAB		Date Prep	: 08.21.2020 13:0	00	Basis:	Wet V	Veight	
Seq Number:	3135303								
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	20.3	9.98	mg/kg	08.21.2020 14	4:50		1

### Xenco

## **Certificate of Analytical Results 670695**

## Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Sample Id: AH#8 (2-2.5')		Matrix:	Soil		Date Received	1:08.21.2020	10:55
Lab Sample Id: 670695-005		Date Colle	ected: 08.19.2020 00:00		Sample Depth	: 2 - 2.5 ft	
Analytical Method: Inorganic Anions	by EPA 300/300.1				Prep Method:	E300P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep	: 08.21.2020 13:00		Basis:	Wet Weight	
Seq Number: 3135303							
Parameter	Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil
Chloride	16887-00-6	16.1	10.0	mg/kg	08.21.2020 14	4:56	1

#### Environment Testing Xenco

## **Certificate of Analytical Results 670695**

## Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Sample Id:         AH#8 (3-3.5')           Lab Sample Id:         670695-006		Matrix: Date Col	Soil lected: 08.19.2020 00:00	I	Date Received Sample Depth:		0:55
Analytical Method: Inorganic Tech: MAB	e Anions by EPA 300/300.1				Prep Method: % Moisture:	E300P	
Analyst: MAB Seq Number: 3135303		Date Prej	p: 08.21.2020 13:00	1	Basis:	Wet Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	te Flag	Dil
Chloride	16887-00-6	78.7	10.0	mg/kg	08.21.2020 15	:13	1

### Xenco

## **Certificate of Analytical Results 670695**

## Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Sample Id: Lab Sample Id	<b>AH#8 (4-4.5')</b> d: 670695-007		Matrix: Date Coll	Soil ected: 08.19.2020 00:00	)	Date Received Sample Depth			55
Analytical Me Tech:	ethod: Inorganic Anions MAB	s by EPA 300/300.1				Prep Method: % Moisture:	E300	Р	
Analyst:	MAB		Date Prep	o: 08.21.2020 13:00	)	Basis:	Wet V	Weight	
Seq Number:	3135303								
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride		16887-00-6	2560	49.8	mg/kg	08.21.2020 1	5:18		5

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## **Certificate of Analytical Results 670695**

### Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Sample Id: Lab Sample Id	Horizonal - NW1 d: 670695-008		Matrix: Date Coll	Soil ected: 08.19	9.2020 00:00		Date Received	1:08.2	1.2020 10:	55
Analytical Me Tech:	ethod: Inorganic Anions MAB	s by EPA 300/300.1					Prep Method: % Moisture:	E300	)P	
Analyst:	MAB		Date Prep	08.21	1.2020 13:00		Basis:	Wet	Weight	
Seq Number:	3135303									
Parameter		Cas Number	Result	RL		Units	Analysis Da	ate	Flag	Dil
Chloride		16887-00-6	3520	49.8		mg/kg	08.21.2020 1	5:24		5

## **Certificate of Analytical Results 670695**

## Tetra Tech- Midland, Midland, TX

White Fed Com #1 H(5.13.19)

Sample Id: Lab Sample Id	Horizontal- SE1 d: 670695-009		Matrix: Date Coll	Soil lected: 08.19.2020 00:0	0	Date Received	1:08.21.2020 1	0:55
Analytical Me Tech:	ethod: Inorganic Anions MAB	s by EPA 300/300.1				Prep Method: % Moisture:	E300P	
Analyst:	MAB		Date Prep	o: 08.21.2020 13:0	0	Basis:	Wet Weight	
Seq Number:	3135303							
Parameter		Cas Number	Result	RL	Units	Analysis D	ate Flag	Dil
Chloride		16887-00-6	856	9.98	mg/kg	08.21.2020 1	5:29	1

#### Environment Testing Xenco

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.	ND Not Detected.			
RL Reporting Limit				
MDL Method Detection Limit	SDL Sample Det	ection Limit	LOD Limit of Detection	
PQL Practical Quantitation Limit	MQL Method Qua	antitation Limit	LOQ Limit of Quantitatio	n
DL Method Detection Limit				
NC Non-Calculable				
SMP Client Sample		BLK	Method Blank	
BKS/LCS Blank Spike/Laboratory	Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labor	ratory Control Sample Duplicate
MD/SD Method Duplicate/Sampl	e Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate
+ NELAC certification not offered f	for this compound.			

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

🔅 eurofins **Environment Testing** Xenco

#### **QC Summary** 670695

### **Tetra Tech- Midland**

White Fed Com #1 H(5.13.19)

Analytical Method:	Inorganic A	nions by	y EPA 300/	300.1					Pr	ep Metho	od: E30	0P	
Seq Number:	3135303				Matrix:	Solid				Date Pre	ep: 08.2	21.2020	
MB Sample Id:	7709983-1-I	BLK		LCS Sar	nple Id:	7709983-1	-BKS		LCSI	D Sample	Id: 770	9983-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		<10.0	250	263	105	266	106	90-110	1	20	mg/kg	08.21.2020 14:11	
<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>Inorganic</b> <i>A</i> 3135303 670695-001	nions by		MS Sar	1	Soil 670695-00	)1 S		MSI		ep: 08.2 Id: 670	21.2020 695-001 SD	
Seq Number:	3135303	Anions by Parent Result	y EPA 300/ Spike Amount				)1 S MSD %Rec	Limits		Date Pre	ep: 08.2	21.2020	Flag
Seq Number: Parent Sample Id:	3135303	Parent	Spike	MS Sar MS	nple Id: MS	670695-00 MSD	MSD	<b>Limits</b> 90-110	MSI	Date Pre D Sample <b>RPD</b>	ep: 08.2 Id: 670	21.2020 695-001 SD Analysis	Flag

Analytical Method:	Inorganic Anions b	y EPA 300/.	300.1					Pr	ep Metho	d: E30	0P	
Seq Number:	3135303		]	Matrix:	Soil				Date Pre	p: 08.2	21.2020	
Parent Sample Id:	670700-002		MS San	nple Id:	670700-00	02 S		MS	D Sample	Id: 670	700-002 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5010	198	5210	101	5210	99	90-110	0	20	mg/kg	08.21.2020 15:46	

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $\begin{array}{l} \text{[D]} & = 100^{+} \left[ (\text{C-E}) / (\text{C+E}) \right] \\ \text{[D]} & = 100^{+} (\text{C}) / [\text{B}] \\ \text{Log Diff.} & = \text{Log(Sample Duplicate)} - \text{Log(Original Sample)} \end{array}$  LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

.

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## **Eurofins Xenco, LLC**

### Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland	Acceptable Temperature I	Range: 0 - 6 degC
Date/ Time Received: 08.21.2020 10.55.00 AM	Air and Metal samples Ac	
Work Order #: 670695	Temperature Measuring d	evice used : T_NM_007
Sample Rec	eipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.2	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?	Yes	
#6*Custody Seals Signed and dated?	Yes	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	Samples received in bulk containers.
#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:

Date: 08.21.2020

Checklist reviewed by: Jessica WAMER Jessica Kramer

Date: 08.21.2020

Received by OCD: 5/14/2021 10:15:53 AM Form C-141 State of New Mexico

Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

Incident ID	
District RP	
Facility ID	
Application ID	

# **Remediation Plan**

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Title: Date: Signature: Telephone: _____ email: **OCD Only** Received by: Robert Hamlet Date: 7/22/2021 Approved X Approved with Attached Conditions of Approval Denied Deferral Approved Robert Hamlet Date: 7/22/2021 Signature:

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

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

District III

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

District IV

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

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

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	28271
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

	Condition	Condition
Ву		Date
	The Monitoring Workplan Plan is approved with the following conditions: The OCD requests that all sample points be sampled in 1-foot increments down to 4 feet below surface, not just the top 1 foot. COG will need to put together a proposal outlining how they will mitigate flowlines from releasing liquids into the draw/arroyos in this immediate area and prevention measures to keep it from happening again. COG's response to the BLM and OCD has been that they cannot safely remediate due to the depth of the draw and further impact on the native vegetation would be higher than removing the impact from the area. With 2 releases occurring within 4 days of each other, prevention measures need to be put in place. Include your proposal in the next "Monitoring Update" on how COG proposes to handle this matter.	7/22/2021

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