

SITE INFORMATION

Report Type: Work Plan NRM2011334979

General Site Information:

Site:	Booster Pump 1003					
Company:	Solaris Water Midstream, LLC					
Section, Township and Range	Unit P	Sec. 24	T 24S	R 29E		
Lease Number:						
County:	Eddy County					
GPS:	32.19852			-103.93148		
Surface Owner:	Federal					
Mineral Owner:	Federal					
Directions:	From the intersection of McDonald Rd & Gavalin Rd, travel northeast on Gavalin Rd for approximately 0.25 miles to location on north side of lease road					

Release Data:

Date Released:	4/20/2020
Type Release:	Produced Water
Source of Contamination:	Produced Water Line
Fluid Released:	342 bbl water
Fluids Recovered:	55 bbls water

Official Communication:

Name:	Rob Kirik		Clair Gonzales
Company:	Solaris Water Midstream, LLC		Tetra Tech
Address:	907 Tradewinds Blvd,		901 West Wall Street
	Ste B		Suite 100
City:	Midland, Texas 79706		Midland, Texas
Phone number:	469-978-5620		(432) 687-8110
Fax:			
Email:	rob.kirk@solarismidstream.com		Clair.Gonzales@tetrattech.com

Site Characterization

Depth to Groundwater:	231.01' Below Surface
Karst Potential:	Low
Significant Watercourse:	Located Within 300' of Release

Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	100 mg/kg	100 mg/kg	600 mg/kg



October 2, 2020

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

Re: Work Plan for the Solaris Water Midstream, LLC, Booster Pump 1003 Release, Unit P, Section 24, Township 24 South, Range 29 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by Solaris Water Midstream, LLC (Solaris) to assess a release that occurred at a failed 16 inch poly line at the booster pump, located in Unit P, Section 24, Township 24 South, Range 29 East, Eddy County, New Mexico (Site). The spill site coordinates are 32.19852°, -103.93148°. 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 April 20, 2020, and released approximately 342 barrels of produced water due to a failed 16 inch poly line. Fifty-five (55) barrels of the produced water was recovered. The release occurred at the booster pump and began flowing South/Southwest, following the natural contours of McDonald Road. The impacted areas measuring approximately 800' x 20'. The C-141 Form is included in Appendix A.

Site Background

Incident ID NAB1928444103

On April 1st, 2020, a work plan for the Oxy Sand Dunes Release was submitted by Solaris Water Midstream, LLC. According to the C-141, the release occurred on September 12, 2019, in a pasture and crossed numerous pipeline right-of-ways. There was approximately 20 barrels of produced water released due to a leak at the booster pump, the impacted area measured approximately 110' x 125' and 200' x 5'. The areas of auger holes (AH-3, AH-4, and AH-5) from the Oxy Sand Dunes Release overlaps with the release of the Booster Pump 1003 Release. The Booster Pump 1003 Release is shown on Figure 3, and the Oxy Sand Dunes Release is shown on Figure 5.

Incident ID NRM2003445187

On April 1st, 2020, a work plan for the Oxy Reverse C Release was submitted by Solaris Water Midstream, LLC. According to the C-141, the release occurred on December 7, 2019, the release occurred at the set station and flowed southeast, following the north shoulder of Gavalin Road, then flowing across McDonald Road into a clearing and migrating into the draw. There was approximately

Tetra Tech

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356 barrels of produced water released due to a weld failure on a manifold, the impacted area measured approximately 2400' x 4'. The areas of auger holes (AH-1, AH-2, and AH-3) from the Oxy Reverse C Release overlaps with the release of the Booster Pump 1003 Release. The Booster Pump 1003 Release is shown on Figure 3, and the Oxy Reverse C Release is shown on Figure 6.

Site Characterization

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. Additionally, the site is in a low karst potential area. However, a watercourse is located within 300' of the site, according to the USGS topographic map.

The nearest water well is listed on the United States Geological Survey (USGS) national water information system, approximately 1.06 miles Northeast of the site, and has a reported depth to groundwater of 231.02' 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.

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

Auger Holes

On July 15, 2020, Tetra Tech personnel were onsite to evaluate and sample the release area. A total of sixteen (16) auger holes (AH-1 through AH-16) were installed in the area of the release, to total depths ranging from surface to 4.5' below surface. 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 3.

Referring to Table 1, none of the samples analyzed showed benzene or total BTEX concentrations above the laboratory reporting limits. However, the area of AH-11 and AH-13 showed TPH concentrations above the RRAL at 1.5' below surface, with concentrations of 424 mg/kg and 134 mg/kg, respectively. The areas of AH-3, AH-4, AH-6 through AH-8, and AH-10 through AH-16 showed chloride concentrations above RRALs at depths ranging from surface to 4.5', with concentration highs of 5,800 mg/kg, 4,770 mg/kg, 4,890 mg/kg, 1,730 mg/kg, 5,160 mg/kg, 1,750 mg/kg, 6,220 mg/kg, 5,760



mg/kg, 9,700 mg/kg, 4,470 mg/kg, 2,540 mg/kg, 5,050 mg/kg, respectively. The areas of AH-3, AH-6 through AH-8, and AH-10 through AH-16 were not vertically defined for chlorides; deeper samples were not collected due to the dense formation in the area.

Trenches

A total of eleven (11) trenches (Trench-1 through Trench-11) were installed in the area of the auger holes (AH-3, AH-6 through AH-8, and AH-10 through AH-16), to total depths ranging from surface to 10.0' below surface. Selected soil samples were collected and submitted to the laboratory for TPH analysis by EPA method 8015 modified 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, TPH concentrations were below the laboratory reporting limits in the area of Trench-1 through Trench-3, and Trench-5 through Trench-11, however the TPH concentration for the area of Trench-4 reported 1,260 mg/kg at a depth of 0-1.0' below surface. Also, the areas of trenches (Trench-1 through Trench-4, and Trench-6 through Trench-9) all showed chloride concentrations above the RRAL, with concentrations ranging from 15.6 mg/kg to 6,710 mg/kg. All areas trenched were vertically defined.

Horizontals

Referring to Table 1, none of the horizontal (H-1 through H-10) samples showed TPH, benzene, or BTEX concentrations above RRALs. Additionally, none of the horizontal samples showed chloride concentrations above the 600 mg/kg remediation level, with the exception of H-2 and H-3, which showed chloride concentrations of 1,180 mg/kg and 652 mg/kg, respectively. The concentration of 1,180 mg/kg may be a laboratory error but will be confirmed during remediation activities and will be remediated further as necessary.

Remediation Plan

Based on the laboratory results, Solaris proposes to excavate the areas of trenches (Trench-1 through Trench-11), ranging from depths of 1.5'-8.0' below surface, as shown on Figure 4 and highlighted (green) on Table 1. Due to the location of the release and the flow path, safety concerns and traffic hazards will be considered during the excavation of the areas of trenches (Trench-5 through Trench-11). Five (5) point composite bottom hole and sidewall confirmation samples will be collected every 500 sq. ft, due to the size of release area, to ensure proper removal of the impacted soils. All excavation activities will be completed based on laboratory data unless safety concerns inhibit safe removal of impacted soils.

The work plans from the previous Solaris releases, (Incident ID NAB1928444103 / Incident ID NRM2003445187) will be executed as previously planned. Remediation activities for all 3 releases will be performed simultaneously.

The proposed excavation depths may not be reached due to wall cave-ins and safety concerns for onsite personnel. Also, impacted soil around oil and gas equipment, structures or lines may not be viable or practicable to be removed due to safety concerns for on-site personnel. Additionally, numerous underground pipelines are in the area. As such, Solaris will excavate the impacted soils to the maximum extent practicable.



Once the excavation is complete, the areas will be backfilled with clean material to surface grade. Solaris estimates approximately 10,084 cubic yards will be excavated, and the remediation to be implemented 90 days after the work plan is approved.

Revegetation

Solaris proposes to perform reseeded at the site once the remediation is completed. Reseeding will be performed in June 2020 to coincide with the rainy season in Southeastern New Mexico and aid in revegetation. Based on the soils at the site, the BLM Loamy (L) Sites Seed Mixture will be used and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a handheld broadcaster and raked. If a handheld broadcaster is used for dispersal, the pounds PLS per acre will be doubled. The soil survey information and BLM seed mixture to be used is included in Appendix D.

Conclusion

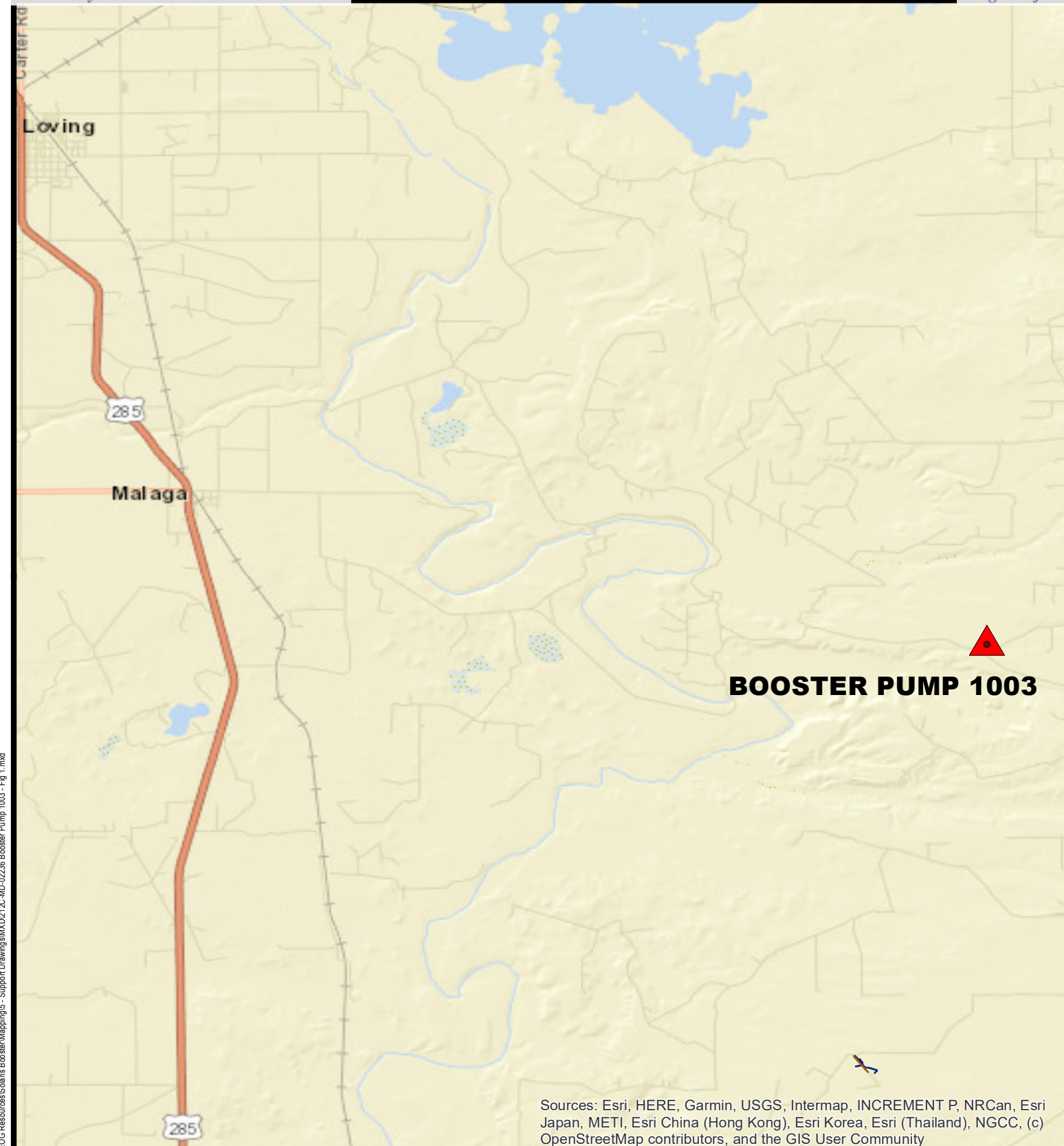
Once the remediation activities have been completed, a final report will be submitted. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted,
TETRA TECH

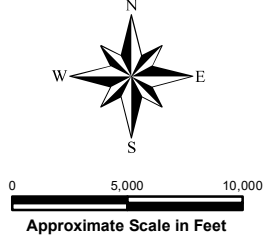
Brittany Long
Environmental Scientist

Clair Gonzales, P.G.
Project Manager

Figures



SITE LOCATION



OVERVIEW MAP

BOOSTER PUMP 1003

Property Located at coordinates 32.19852, -103.93148
LEA COUNTY, NEW MEXICO



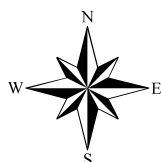
TETRA TECH
901 W Wall St Ste. 100,
Midland, TX 79701
(432) 682-4559

Project #: 212C-MD-02236
Date: 09-21-20
Drawn By: DN

FIGURE
1



Copyright: © 2013 National Geographic Society, i-cubed.

**SITE LOCATION**

0 1,000 2,000

Approximate Scale in Feet

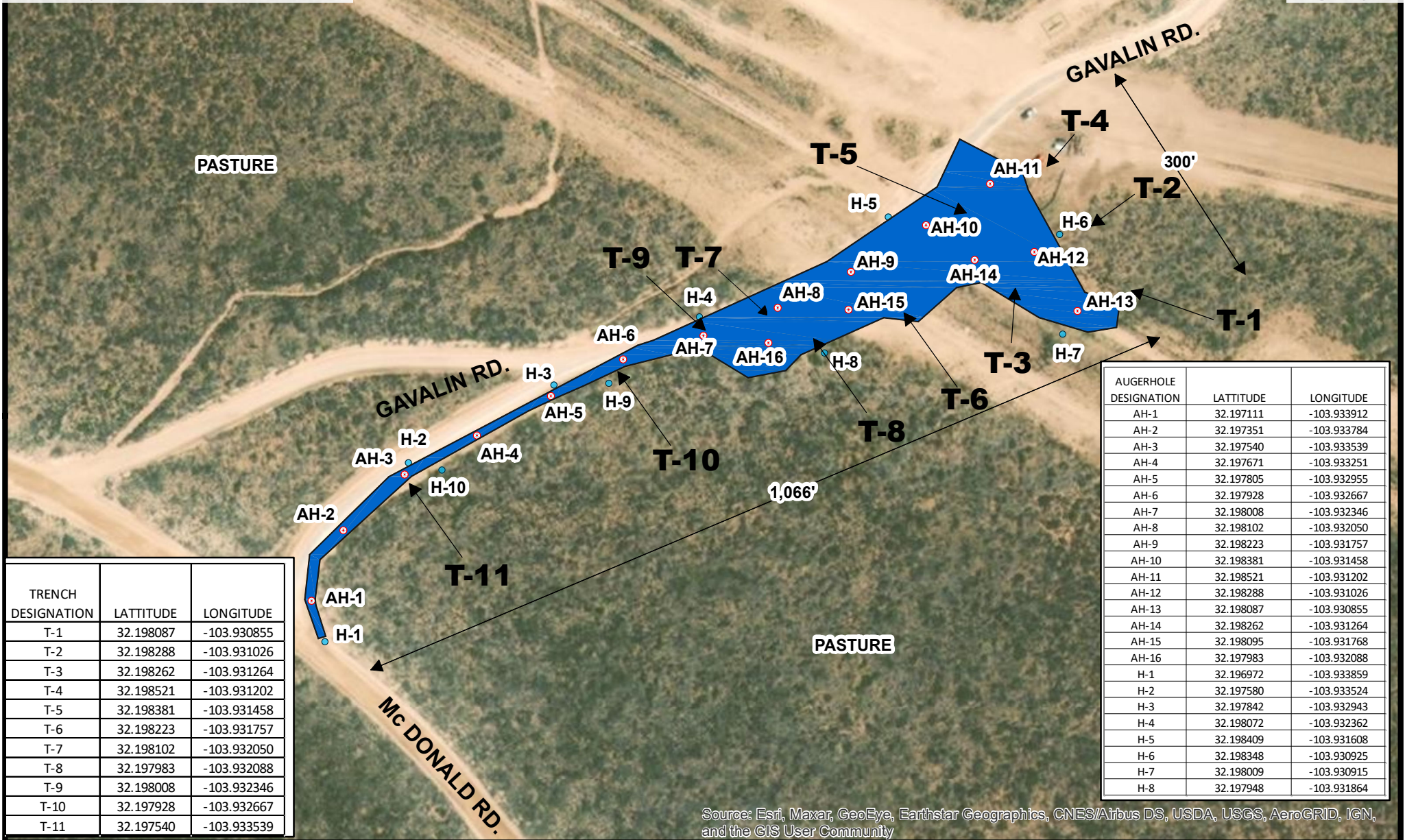
OVERVIEW MAP**BOOSTER PUMP 1003**

Property Located at coordinates 32.19852, -103.93148
LEA COUNTY, NEW MEXICO



Project #: 212C-MD-02236
Date: 09-21-20
Drawn By: DN

FIGURE
2



TRENCH DESIGNATION	LATTITUDE	LONGITUDE
T-1	32.198087	-103.930855
T-2	32.198288	-103.931026
T-3	32.198262	-103.931264
T-4	32.198521	-103.931202
T-5	32.198381	-103.931458
T-6	32.198223	-103.931757
T-7	32.198102	-103.932050
T-8	32.197983	-103.932088
T-9	32.198008	-103.932346
T-10	32.197928	-103.932667
T-11	32.197540	-103.933539

AUGERHOLE DESIGNATION	LATTITUDE	LONGITUDE
AH-1	32.197111	-103.933912
AH-2	32.197351	-103.933784
AH-3	32.197540	-103.933539
AH-4	32.197671	-103.933251
AH-5	32.197805	-103.932955
AH-6	32.197928	-103.932667
AH-7	32.198008	-103.932346
AH-8	32.198102	-103.932050
AH-9	32.198223	-103.931757
AH-10	32.198381	-103.931458
AH-11	32.198521	-103.931202
AH-12	32.198288	-103.931026
AH-13	32.198087	-103.930855
AH-14	32.198262	-103.931264
AH-15	32.198095	-103.931768
AH-16	32.197983	-103.932088
H-1	32.196972	-103.933859
H-2	32.197580	-103.933524
H-3	32.197842	-103.932943
H-4	32.198072	-103.932362
H-5	32.198409	-103.931608
H-6	32.198348	-103.930925
H-7	32.198009	-103.930915
H-8	32.197948	-103.931864

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

AUGERHOLE SAMPLE LOCATION

HORIZONTAL SAMPLE LOCATION

SPILL

060120

Approximate Scale in Feet

SPILL ASSESSEMENT MAP - STATE REPORT

BOOSTER PUMP 1003

Property Located at coordinates 32.19852, -103.93148

LEA COUNTY, NEW MEXICO

TETRA TECH

901 W Wall St Ste. 100,

Midland, TX 79701

(432) 682-4559

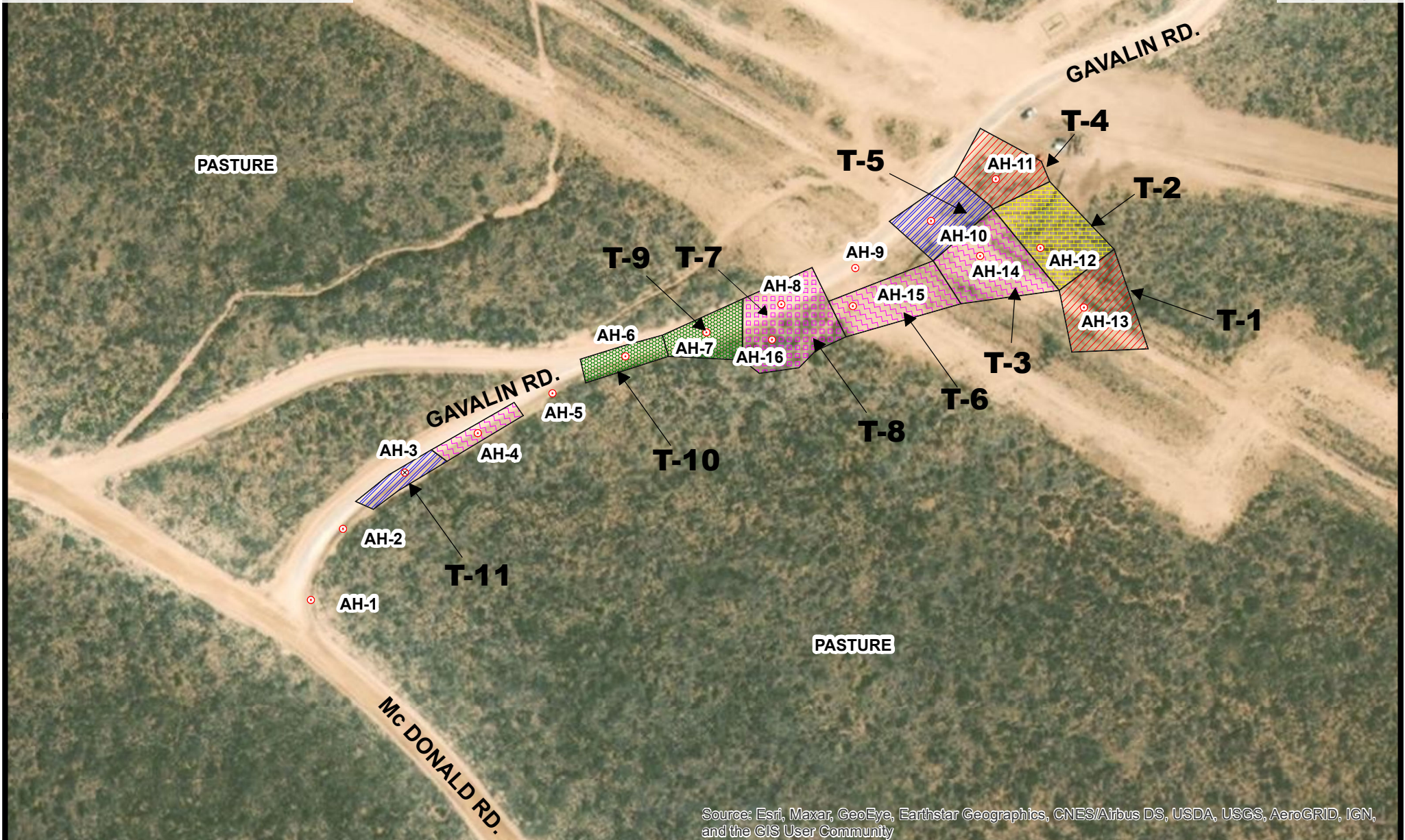
Project #: 212C-MD-02236

Date: 09/21/20

Drawn By: DN

FIGURE

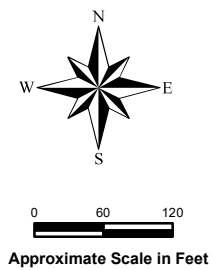
3



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- | | |
|---|--|
|  1.5' EXCAVATED DEPTH |  4.0' EXCAVATED DEPTH |
|  2.0' EXCAVATED DEPTH |  6.0' EXCAVATED DEPTH |
|  3.0' EXCAVATED DEPTH |  8.0' EXCAVATED DEPTH |

 AUGER SAMPLE LOCATION



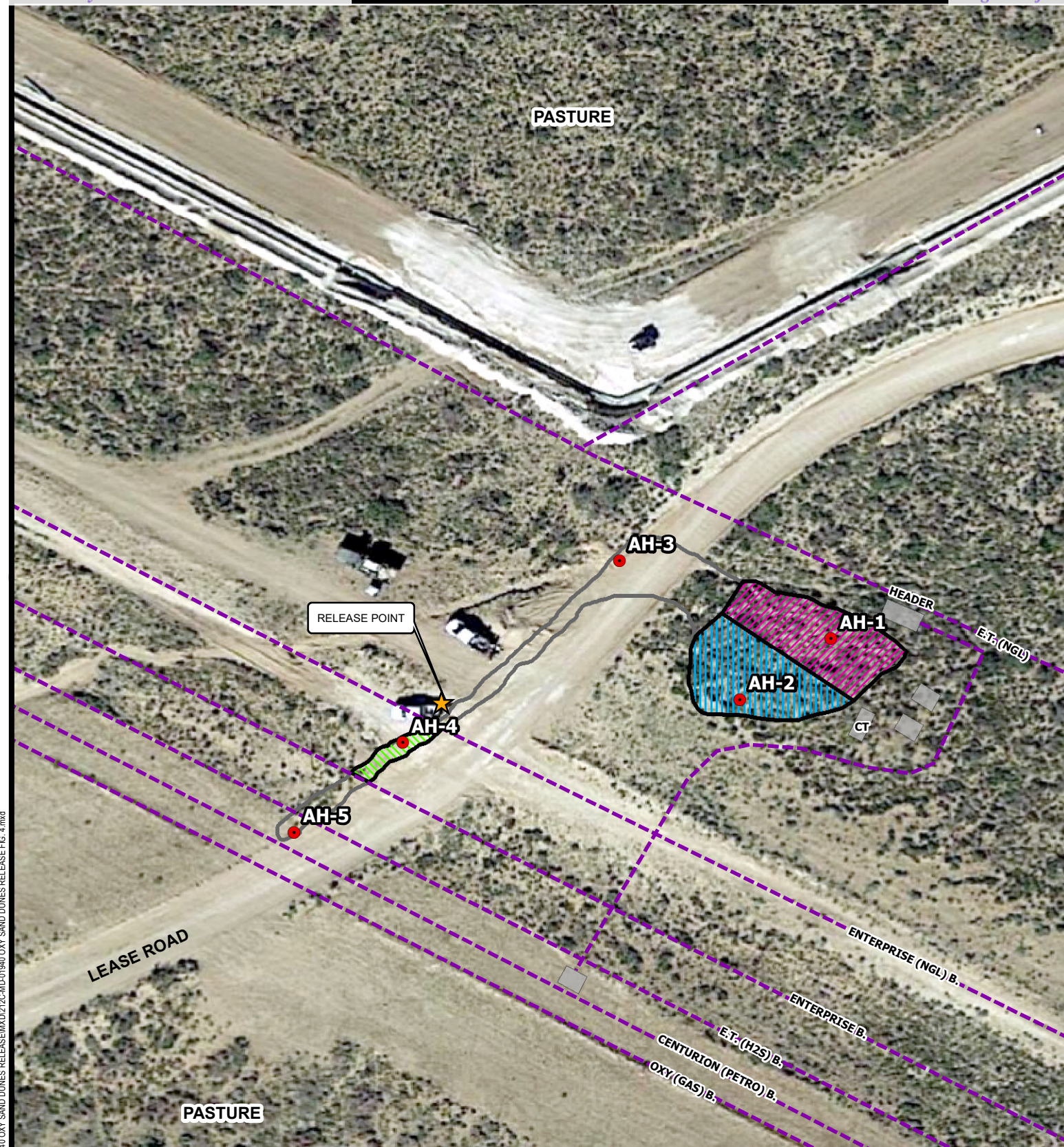
PROPOSED EXCAVATION MAP - STATE REPORT
BOOSTER PUMP 1003
Property Located at coordinates 32.19852, -103.93148
LEA COUNTY, NEW MEXICO



 **TETRA TECH**
901 W Wall St Ste. 100,
Midland, TX 79701
(432) 682-4559

Project #: 212C-MD-02236
Date: 09/21/20
Drawn By: DN

FIGURE
4



● AUGERHOLE SAMPLE LOCATIONS

★ RELEASE POINT

--- BURIED PIPELINE

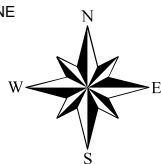
1.0'-1.5' DEPTH

2.5' DEPTH

UP TO 4.0' DEPTH

□ EQUIPMENT

□ SPILL OUTLINE



0 30 60
Approximate Scale in Feet

PROPOSED EXCAVATION AREA & DEPTH MAP
OXY SAND DUNES RELEASE
Property Located at coordinates 32.198510°,-103.931480°
EDDY COUNTY, NEW MEXICO



Project #:
212C-MD-01940
Date: 011-14-2019

FIGURE
5

Source: "New Mexico". 32°11'54.64"N, 103°55'53.33"W. Google Earth.
February 2019 . November 14, 2019.

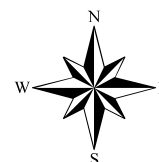


- AUGERHOLE SAMPLE LOCATIONS
- BACKGROUND SAMPLE LOCATIONS

--- DRAW

--- BURIED PIPELINE

 PROPOSED 2.0' EXCAVATION DEPTH AREA



0 100 200
Approximate Scale in Feet

PROPOSED EXCAVATION MAP
OXY REVERSE C
 Property Located at coordinates 31.198580°, -103.930730°
 EDDY COUNTY, NEW MEXICO



Project #: 212C-MD-02030
 Date: 01-07-2020
 Drawn By: MLM

FIGURE
6

Source: "New Mexico", 32°11'54.64"N, 103°55'53.33"W. Google Earth.
 February 2019, November 14, 2019.

Tables

Table 1
Solaris Midstream
Booster Pump 1003
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
AH-1	7/15/2020	0-1.0	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	62.7
	"	1.0-1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	39.3
AH-2	7/15/2020	0-1.0	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	27.2
	"	1.0-1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	71.8
AH-3	7/15/2020	0-1.0	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	5,350
	"	1.0-1.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	5,800
Trench-11	8/31/2020	0-1.0	X		-	-	-	-	-	-	-	-	-	58.7
	"	1.0-2.0	X		-	-	-	-	-	-	-	-	-	67.2
AH-4	7/15/2020	0-1.0	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1,680
	"	1.0-1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	4,770
	"	2.0-2.5	X		-	-	-	-	-	-	-	-	-	661
	"	3.0-3.5	X		-	-	-	-	-	-	-	-	-	1,410
	"	4.0-4.5	X		-	-	-	-	-	-	-	-	-	180
AH-5	7/15/2020	0-1.0	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	39.9
	"	1.0-1.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	26.5
AH-6	7/15/2020	0-1.0	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	3,490
	"	1.0-1.5	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	4,850
	"	2.0-2.5	X		-	-	-	-	-	-	-	-	-	4,890
Trench-10	8/31/2020	0-1.0	X		-	-	-	-	-	-	-	-	-	42.2
	"	1.0-2.0	X		-	-	-	-	-	-	-	-	-	540
AH-7	7/15/2020	0-1.0	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	1,520
	"	1.0-1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1,730
	"	2.0-2.5	X		-	-	-	-	-	-	-	-	-	1,380
Trench-9	8/31/2020	0-1.0	X		-	-	-	-	-	-	-	-	-	787
	"	1.0-2.0	X		-	-	-	-	-	-	-	-	-	225

Table 1
Solaris Midstream
Booster Pump 1003
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
AH-8	7/15/2020	0-1.0	X		<50.0	87.3	<50.0	87.3	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	3,900
	"	1.0-1.5	X		<50.0	65.8	<50.0	65.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	4,430
	"	2.0-2.5	X		-	-	-	-	-	-	-	-	-	5,160
	"	3.0-3.5	X		-	-	-	-	-	-	-	-	-	4,870
Trench-7	8/31/2020	0-1.0	X		-	-	-	-	-	-	-	-	-	4050
	"	1.0-2.0	X		-	-	-	-	-	-	-	-	-	4680
	"	2.0-3.0	X		-	-	-	-	-	-	-	-	-	4300
	"	3.0-4.0	X		-	-	-	-	-	-	-	-	-	4410
	"	4.0-5.0	X		-	-	-	-	-	-	-	-	-	3710
	"	5.0-6.0	X		-	-	-	-	-	-	-	-	-	3640
	"	6.0-7.0	X		-	-	-	-	-	-	-	-	-	2070
	"	7.0-8.0	X		-	-	-	-	-	-	-	-	-	1670
	"	8.0-9.0	X		-	-	-	-	-	-	-	-	-	289
	"	9.0-10.0	X		-	-	-	-	-	-	-	-	-	328
AH-9	7/15/2020	0-1.0	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	225
AH-10	7/15/2020	0-1.0	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	1,750
Trench-5	8/31/2020	0-1.0	X		-	-	-	-	-	-	-	-	-	82.4
	"	1.0-2.0	X		-	-	-	-	-	-	-	-	-	15.6
AH-11	7/15/2020	0-1.0	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	3,440
	"	1.0-1.5	X		<49.9	353	70.6	424	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6,220
Trench-4	8/31/2020	0-1.0	X		<50.0	1030	228	1260	-	-	-	-	-	6710
	"	1.0-2.0	X		<49.8	<49.8	<49.8	<49.8	-	-	-	-	-	3160
	"	2.0-3.0	X		<50.2	<50.2	<50.2	<50.2	-	-	-	-	-	247
	"	3.0-4.0	X		<49.8	<49.8	<49.8	<49.8	-	-	-	-	-	227
AH-12	7/15/2020	0-1.0	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5,710
	"	1.0-1.5	X		<50.0	62.8	<50.0	62.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	5,760
Trench-2	8/31/2020	0-1.0	X		-	-	-	-	-	-	-	-	-	804
	"	1.0-2.0	X		-	-	-	-	-	-	-	-	-	5520
	"	2.0-3.0	X		-	-	-	-	-	-	-	-	-	3810
	"	3.0-4.0	X		-	-	-	-	-	-	-	-	-	796
	"	4.0-5.0	X		-	-	-	-	-	-	-	-	-	1430
	"	5.0-6.0	X		-	-	-	-	-	-	-	-	-	1730
	"	6.0-7.0	X		-	-	-	-	-	-	-	-	-	598
	"	7.0-8.0	X		-	-	-	-	-	-	-	-	-	73.6
	"	8.0-9.0	X		-	-	-	-	-	-	-	-	-	150

Table 1
Solaris Midstream
Booster Pump 1003
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
AH-13	7/15/2020	0-1.0	X		<49.9	66.1	<49.9	66.1	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	4,530
	"	1.0-1.5	X		<50.0	134	<50.0	134	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	9,700
Trench-1	8/31/2020	0-1.0	X		<50.0	<50.0	<50.0	<50.0	-	-	-	-	-	1530
	"	1.0-2.0	X		<50.0	<50.0	<50.0	<50.0	-	-	-	-	-	1780
	"	2.0-3.0	X		<50.0	<50.0	<50.0	<50.0	-	-	-	-	-	111
	"	3.0-4.0	X		<49.9	<49.9	<49.9	<49.9	-	-	-	-	-	484
AH-14	7/15/2020	0-1.0	X		<49.9	62.2	<49.9	62.2	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	3,620
	"	1.0-1.5	X		<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	4,130
	"	2.0-2.5	X		-	-	-	-	-	-	-	-	-	4,470
	"	3.0-3.5	X		-	-	-	-	-	-	-	-	-	4,140
Trench-3	8/31/2020	0-1.0	X		-	-	-	-	-	-	-	-	-	3,600
	"	1.0-2.0	X		-	-	-	-	-	-	-	-	-	4400
	"	2.0-3.0	X		-	-	-	-	-	-	-	-	-	560
	"	3.0-4.0	X		-	-	-	-	-	-	-	-	-	392
	"	4.0-5.0	X		-	-	-	-	-	-	-	-	-	155
	"	5.0-6.0	X		-	-	-	-	-	-	-	-	-	175
AH-15	7/15/2020	0-1.0	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,500
	"	1.0-1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2,540
	"	2.0-2.5	X		-	-	-	-	-	-	-	-	-	2,450
	"	3.0-3.5	X		-	-	-	-	-	-	-	-	-	915
Trench-6	8/31/2020	0-1.0	X		-	-	-	-	-	-	-	-	-	5540
	"	1.0-2.0	X		-	-	-	-	-	-	-	-	-	3700
	"	2.0-3.0	X		-	-	-	-	-	-	-	-	-	143
	"	3.0-4.0	X		-	-	-	-	-	-	-	-	-	222
AH-16	7/15/2020	0-1.0	X		<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	2,790
	"	1.0-1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	4,780
	"	2.0-2.5	X		-	-	-	-	-	-	-	-	-	5,050
	"	3.0-3.5	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4,380
Trench-8	"	4.0-4.5	X		<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	4,730
	8/31/2020	0-1.0	X		-	-	-	-	-	-	-	-	-	3,620
	"	1.0-2.0	X		-	-	-	-	-	-	-	-	-	5120
	"	2.0-3.0	X		-	-	-	-	-	-	-	-	-	4340
	"	3.0-4.0	X		-	-	-	-	-	-	-	-	-	4820
	"	4.0-5.0	X		-	-	-	-	-	-	-	-	-	4790
	"	5.0-6.0	X		-	-	-	-	-	-	-	-	-	4550
	"	6.0-7.0	X		-	-	-	-	-	-	-	-	-	3230
	"	7.0-8.0	X		-	-	-	-	-	-	-	-	-	3220
	"	8.0-9.0	X		-	-	-	-	-	-	-	-	-	318
	"	9.0-10.0	X		-	-	-	-	-	-	-	-	-	167

Table 1
Solaris Midstream
Booster Pump 1003
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
H-1	7/15/2020	0-0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	0.00331	<0.00199	<0.00199	0.00331	25.5
H-2	7/15/2020	0-0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00198	0.00235	<0.00198	<0.00198	0.00235	1,180
H-3	7/15/2020	0-0.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	652
H-4	7/15/2020	0-0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	16.8
H-5	7/15/2020	0-0.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	0.00410	<0.00200	0.00471	0.00881	19.6
H-6	7/15/2020	0-0.5	X		<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	126
H-7	7/15/2020	0-0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	14.7
H-8	7/15/2020	0-0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	11.9
H-9	7/15/2020	0-0.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	10.1
H-10	7/15/2020	0-0.5	X		<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	14.7

(-)

Not Analyzed



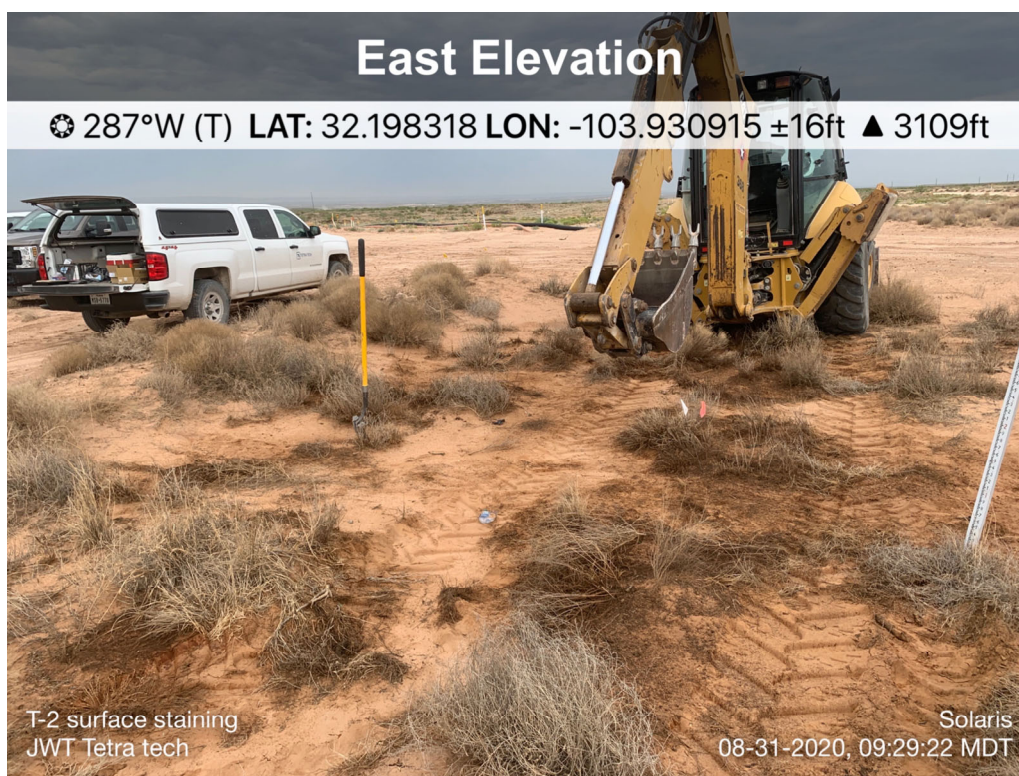
Proposed Excavation Depth

Photos

Solaris Water Midstream
Booster Pump 1003
Eddy County, New Mexico



TETRA TECH



View of Release Area – View East



View of Release Area – View East

Solaris Water Midstream
Booster Pump 1003
Eddy County, New Mexico



TETRA TECH



View of Release Area – View Southwest



View of Release Area – View Northeast

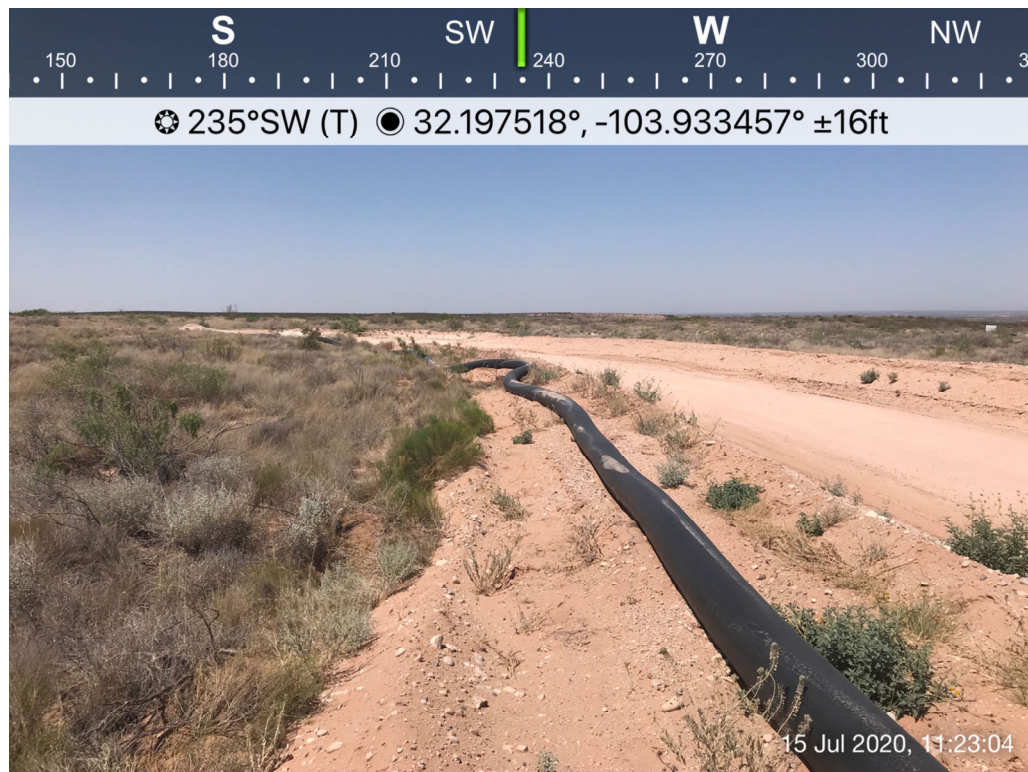
Solaris Water Midstream
Booster Pump 1003
Eddy County, New Mexico



TETRA TECH



View of Release Area – View Northeast



View of Release Area – View Southwest

Solaris Water Midstream
Booster Pump 1003
Eddy County, New Mexico



TETRA TECH



View of Release Area – View Southwest

Appendix A

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	NRM2011334979
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Solaris Water Midstream, LLC	OGRID 371643
Contact Name Rob Kirk	Contact Telephone O 432-203-9020 C 469-978-5620
Contact email rob.kirk@solarismidstream.com	Incident # (assigned by OCD)
Contact mailing address 907 Tradewinds Blvd, Ste B, Midland, TX 79706	

Location of Release Source

Latitude 32.19852 Longitude -103.93148
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Booster Pump 1003	Site Type Produced Water Line
Date Release Discovered 04/20/2020	API# (if applicable)

Unit Letter	Section	Township	Range	County
SESE	24	24S	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) 342	Volume Recovered (bbls) 55
	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

A 16-inch poly line failed at the Booster Pump. The pump was not on, and the line was not flowing. The line was shut in and the leak was stopped. The pipe section was replaced. The water released flowed along natural contours around McDonald road. A Hydro-Vac truck removed free-standing water. The remainder of the water absorbed into the soil. The area impacted ranges from 4 feet to 20 ft wide by 800 feet long, approx. 9,600 sq. feet. Release volume was determined by the size of the line, the opening, the time it took to shut in the line, and the length of line under gravity (as the line was not flowing) and the area impacted. Final residual remediation and reclamation will follow NMOCD guidelines for leaks and spills.

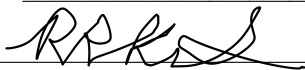
State of New Mexico
Oil Conservation Division

Incident ID	NRM2011334979
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? The volume of Produced Water released.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notice given by submittal of this Form C-141 by Rob Kirk, General Manager, HSE & Compliance as required by NMOCD.	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: Initial observations indicate that some of the released material absorbed into the soil in the area described.	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Rob Kirk</u>	Title: <u>General Manager, HSE and Compliance</u>
Signature: <u></u>	Date: <u>04/21/2020</u>
email: <u>rob.kirk@solarismidstream.com</u>	Telephone: <u>432-203-9020</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>4/22/2020</u>

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: RR Paul Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the 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: RR Paul Date: _____
email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

Appendix B



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

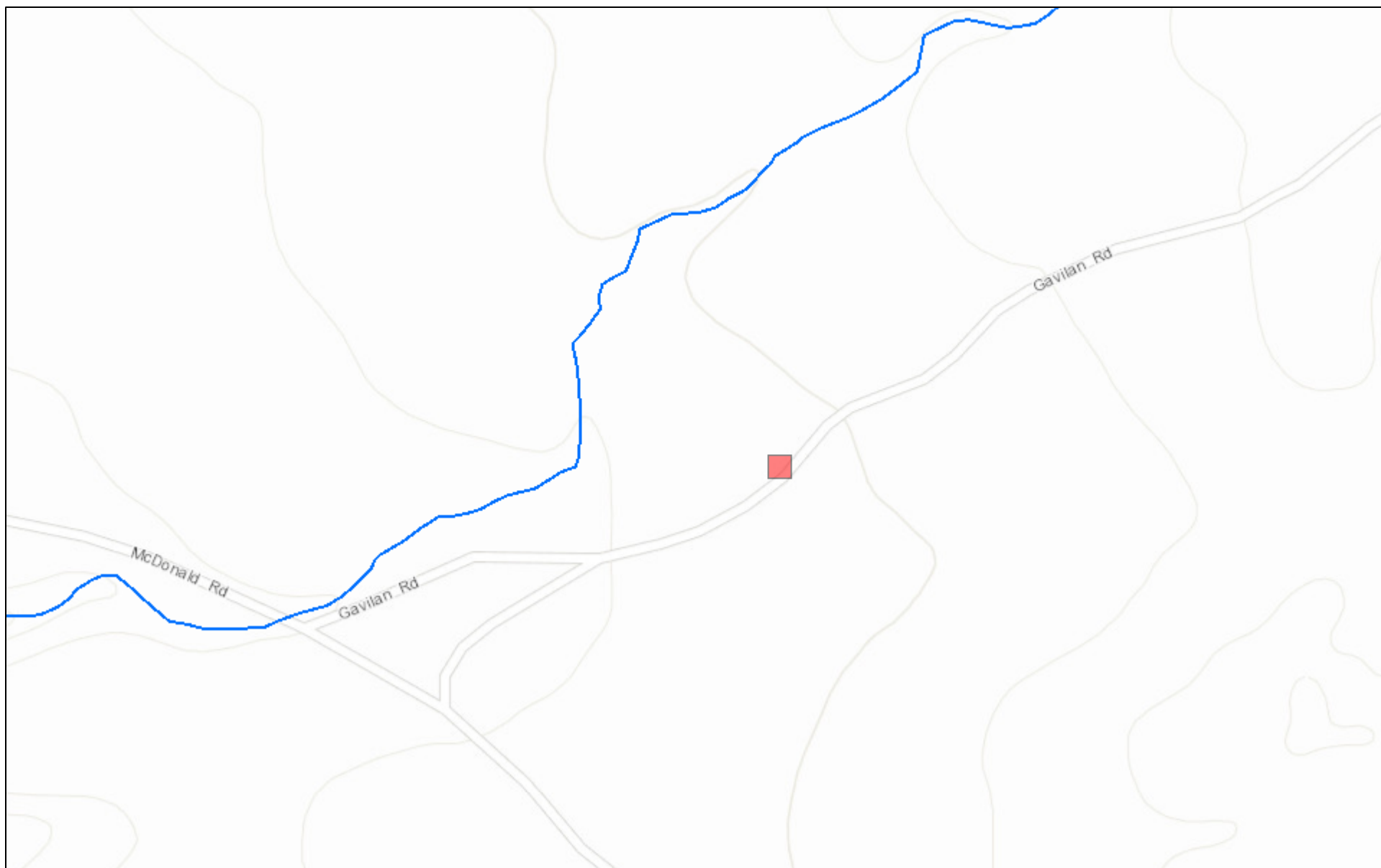
National Water Information System: Mapper

[Help](#) [Info](#)

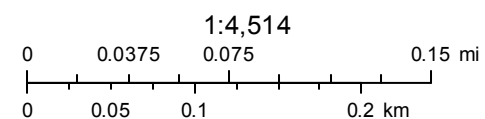


Site Information

New Mexico NFHL Data



September 20, 2020



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



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

New Mexico

GO

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- **NOTICE 09-08-2020: The [NWIS Mapper](#) is experiencing intermittent issues. Developers are looking into the problem. Thank you for your patience.**
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 321205103544701

Minimum number of levels = 1

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

USGS 321205103544701 24S.30E.19.42113

Eddy County, New Mexico

Latitude 32°12'05", Longitude 103°54'47" NAD27

Land-surface elevation 3,188 feet above NAVD88

The depth of the well is 452 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1958-10-24		D	227.70			2		U		U	A
1959-03-19		D	227.75			2		U		U	A
1975-12-10		D	231.78			2		U		U	A
1976-01-16		D	237.26			2		U		U	A
1976-12-01		D	230.73			2		U		U	A
1977-01-14		D	230.62			2		U		U	A
1983-02-01		D	235.93			2		U		U	A
1987-10-15		D	233.30			2		S		U	A
1998-01-27		D	231.02			2		S		U	A

Explanation

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

[Questions about sites/data?](#)[Feedback on this web site](#)https://nwis.waterdata.usgs.gov/nm/nwis/qwlevels?site_no=321205103544701&agency_cd=USGS&format=html



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 water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00349	C	CUB	ED	1	3	18	24S	29E		591401	3564773*	2734		
C 00381	C	CUB	ED	3	2	3	07	24S	29E	591682	3566297*	2797		
C 00463		C	ED	4	4	4	17	24S	29E	594332	3564282*	260	4	256
C 00856		CUB	ED	1	2	4	30	24S	29E	592538	3561644*	380		
C 00857		CUB	ED	3	1	4	30	24S	29E	592135	3561440*	306		
C 00862		CUB	ED	1	2	4	30	24S	29E	592538	3561644*	155		
C 00863		CUB	ED	3	3	1	16	24S	29E	594524	3565091*	220		
C 00863 CLW199506	O	CUB	ED	3	3	1	16	24S	29E	594524	3565091*	220		
C 02713		CUB	ED	4	4	1	16	24S	29E	591633	3565944	230	18	212
C 03615 POD1		CUB	ED	1	3	2	06	24S	29E	591964	3568500	60	36	24
C 03615 POD2		CUB	ED	4	2	4	06	24S	29E	592661	3568013	60	26	34

Average Depth to Water: **21 feet**

Minimum Depth: **4 feet**

Maximum Depth: **36 feet**

Record Count: 11

Basin/County Search:

County: Eddy

PLSS Search:

Township: 24S

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.

9/24/20 9:29 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

Water Well Data
Average Depth to Groundwater (ft)
Booster Pump 1003
Eddy County, New Mexico

23 South			28 East		
6	16.5	5	4	3	2
7	26.5	8	9	10	11
18	17	16	15	14	13
63			14		33
19	20	21	22	23	24
	56		39	22'	36
30	29	28	27	26	25
	28.7				44
31	32	33	34	35	36

23 South			29 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
10	65				
19	20	21	22	23	24
28					
30	29	28	27	26	25
35					
31	32	33	34	35	36

23 South			30 East		
6	5	4	3	2	1
110				250	
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
			440		

24 South			28 East		
6	70	5	30	4	30
7	8	50	9	10	11
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

24 South			29 East		
6	5	4	3	2	1
7	8	9	10	11	12
160					
18	17	4	16	15	14
			18		
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

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

25 South			28 East		
6	5	4	35	3	32
	59				
7	8	9	10	11	12
18	17	16	15	14	13
67			49		
19	20	21	22	23	24
	96				
30	29	28	27	26	40
	15	90			
31	32	33	34	35	36
					40

25 South			29 East		
6	5	4	3	2	1
40					
7	8	9	10	11	12
18	17	16	15	14	13
			40		
			60		
19	20	21	22	23	24
30	29	28	27	26	25
30					
31	32	115	33	34	35
					36

25 South			30 East		
6	5	4	3	2	295
7	264	8	9	295	10
					390
18	17	16	15	14	13
19	20	21	265	22	23
		268			
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

Appendix C

Certificate of Analysis Summary 667520

Tetra Tech- Midland, Midland, TX

Project Name: Solaris Booster Pump 1003

Project Id: 212C-MD-02236

Contact: Brittany Roberts

Project Location: Eddy Co. NM

Date Received in Lab: Fri 07.17.2020 11:28

Report Date: 07.27.2020 13:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667520-001	667520-002	667520-003	667520-004	667520-005	667520-006
	<i>Field Id:</i>	AH #1 (0-1')	AH #1 (1-1.5')	AH #2 (0-1')	AH #2 (1-1.5')	AH #3 (0-1')	AH #3 (1-1.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	07.24.2020 17:15	07.24.2020 17:15	07.24.2020 17:15	07.24.2020 17:15	07.24.2020 17:15	07.24.2020 17:15
	<i>Analyzed:</i>	07.25.2020 05:23	07.25.2020 05:44	07.25.2020 06:04	07.25.2020 06:25	07.25.2020 06:45	07.25.2020 07:05
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00402 0.00402	<0.00403 0.00403	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	07.20.2020 11:15	07.20.2020 11:15	07.20.2020 11:15	07.20.2020 11:15	07.20.2020 11:15	07.20.2020 11:15
	<i>Analyzed:</i>	07.21.2020 15:35	07.21.2020 15:46	07.21.2020 15:25	07.21.2020 15:30	07.21.2020 15:41	07.21.2020 16:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		62.7 4.96	39.3 5.03	27.2 5.04	71.8 5.02	5350 49.5	5800 49.6
TPH By SW8015 Mod	<i>Extracted:</i>	07.17.2020 12:00	07.17.2020 12:00	07.17.2020 12:00	07.17.2020 12:00	07.17.2020 12:00	07.17.2020 12:00
	<i>Analyzed:</i>	07.17.2020 13:52	07.17.2020 14:57	07.17.2020 15:19	07.17.2020 15:41	07.17.2020 16:03	07.17.2020 16:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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Certificate of Analysis Summary 667520



Tetra Tech- Midland, Midland, TX

Project Name: Solaris Booster Pump 1003

Project Id: 212C-MD-02236

Date Received in Lab: Fri 07.17.2020 11:28

Contact: Brittany Roberts

Report Date: 07.27.2020 13:18

Project Location: Eddy Co. NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667520-007	667520-008	667520-009	667520-010	667520-011	667520-012
	<i>Field Id:</i>	AH #4 (0-1')	AH #4 (1-1.5')	AH #4 (2-2.5')	AH #4 (3-3.5')	AH #4 (4-4.5')	AH #5 (0-1')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	07.24.2020 17:15	07.24.2020 17:15				07.24.2020 17:15
	<i>Analyzed:</i>	07.25.2020 07:26	07.25.2020 07:46				07.25.2020 08:07
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				mg/kg RL
Benzene		<0.00199 0.00199	<0.00202 0.00202				<0.00201 0.00201
Toluene		<0.00199 0.00199	<0.00202 0.00202				<0.00201 0.00201
Ethylbenzene		<0.00199 0.00199	<0.00202 0.00202				<0.00201 0.00201
m,p-Xylenes		<0.00398 0.00398	<0.00403 0.00403				<0.00402 0.00402
o-Xylene		<0.00199 0.00199	<0.00202 0.00202				<0.00201 0.00201
Total Xylenes		<0.00199 0.00199	<0.00202 0.00202				<0.00201 0.00201
Total BTEX		<0.00199 0.00199	<0.00202 0.00202				<0.00201 0.00201
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	07.20.2020 11:15	07.20.2020 11:15	07.20.2020 11:15	07.20.2020 11:15	07.20.2020 11:15	07.20.2020 11:15
	<i>Analyzed:</i>	07.21.2020 16:07	07.21.2020 16:23	07.21.2020 16:28	07.21.2020 16:33	07.21.2020 16:38	07.21.2020 16:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1680 24.8	4770 25.1	661 4.98	1410 5.00	180 5.00	39.9 4.96
TPH By SW8015 Mod	<i>Extracted:</i>	07.17.2020 12:00	07.17.2020 12:00				07.17.2020 12:00
	<i>Analyzed:</i>	07.17.2020 16:46	07.17.2020 17:08				07.17.2020 17:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0				<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0				<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0				<49.9 49.9
Total TPH		<50.0 50.0	<50.0 50.0				<49.9 49.9

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Certificate of Analysis Summary 667520

Tetra Tech- Midland, Midland, TX

Project Name: Solaris Booster Pump 1003

Project Id: 212C-MD-02236

Contact: Brittany Roberts

Project Location: Eddy Co. NM

Date Received in Lab: Fri 07.17.2020 11:28

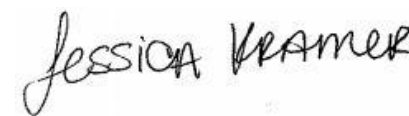
Report Date: 07.27.2020 13:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667520-013	667520-014	667520-015	667520-016	667520-017	667520-018
	<i>Field Id:</i>	AH #5 (1-1.5')	AH #6 (0-1')	AH #6 (1-1.5')	AH #6 (2-2.5')	AH #7 (0-1')	AH #7 (1-1.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	07.24.2020 17:15	07.24.2020 17:15	07.24.2020 17:15		07.24.2020 17:15	07.24.2020 17:15
	<i>Analyzed:</i>	07.25.2020 08:27	07.25.2020 09:49	07.25.2020 10:10		07.25.2020 10:30	07.25.2020 10:51
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL		mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198		<0.00198 0.00198	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198		<0.00198 0.00198	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198		<0.00198 0.00198	<0.00200 0.00200
m,p-Xylenes		<0.00399 0.00399	<0.00402 0.00402	<0.00397 0.00397		<0.00397 0.00397	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198		<0.00198 0.00198	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198		<0.00198 0.00198	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198		<0.00198 0.00198	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	07.20.2020 11:15	07.20.2020 11:15	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10
	<i>Analyzed:</i>	07.21.2020 16:49	07.21.2020 16:54	07.21.2020 02:41	07.21.2020 02:47	07.21.2020 02:53	07.21.2020 03:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		26.5 4.97	3490 25.0	4850 25.2	4890 50.4	1520 25.0	1730 25.2
TPH By SW8015 Mod	<i>Extracted:</i>	07.17.2020 12:00	07.17.2020 12:00	07.17.2020 12:00		07.17.2020 12:00	07.17.2020 12:00
	<i>Analyzed:</i>	07.17.2020 17:51	07.17.2020 18:35	07.17.2020 18:57		07.17.2020 19:19	07.17.2020 19:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL		mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9		<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9		<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9		<49.9 49.9	<50.0 50.0
Total TPH		<49.8 49.8	<50.0 50.0	<49.9 49.9		<49.9 49.9	<50.0 50.0

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Certificate of Analysis Summary 667520

Tetra Tech- Midland, Midland, TX

Project Name: Solaris Booster Pump 1003

Project Id: 212C-MD-02236

Contact: Brittany Roberts

Project Location: Eddy Co. NM

Date Received in Lab: Fri 07.17.2020 11:28

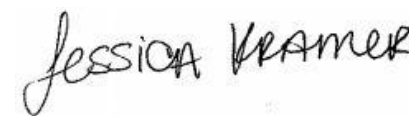
Report Date: 07.27.2020 13:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667520-019	667520-020	667520-021	667520-022	667520-023	667520-024
	<i>Field Id:</i>	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 #9 (0-1')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>		07.24.2020 17:15	07.24.2020 17:15			07.24.2020 17:15
	<i>Analyzed:</i>		07.25.2020 11:11	07.25.2020 11:32			07.25.2020 11:52
	<i>Units/RL:</i>		mg/kg RL	mg/kg RL			mg/kg RL
Benzene			<0.00199 0.00199	<0.00199 0.00199			<0.00200 0.00200
Toluene			<0.00199 0.00199	<0.00199 0.00199			<0.00200 0.00200
Ethylbenzene			<0.00199 0.00199	<0.00199 0.00199			<0.00200 0.00200
m,p-Xylenes			<0.00398 0.00398	<0.00398 0.00398			<0.00399 0.00399
o-Xylene			<0.00199 0.00199	<0.00199 0.00199			<0.00200 0.00200
Total Xylenes			<0.00199 0.00199	<0.00199 0.00199			<0.00200 0.00200
Total BTEX			<0.00199 0.00199	<0.00199 0.00199			<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10
	<i>Analyzed:</i>	07.21.2020 03:18	07.21.2020 03:24	07.21.2020 03:30	07.21.2020 03:36	07.21.2020 03:43	07.21.2020 02:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1380 25.2	3900 25.3	4430 25.1	5160 49.5	4870 49.5	225 4.98
TPH By SW8015 Mod	<i>Extracted:</i>		07.17.2020 12:00	07.17.2020 16:00			07.17.2020 12:00
	<i>Analyzed:</i>		07.17.2020 20:02	07.17.2020 23:35			07.17.2020 20:23
	<i>Units/RL:</i>		mg/kg RL	mg/kg RL			mg/kg RL
Gasoline Range Hydrocarbons (GRO)			<50.0 50.0	<50.0 50.0			<49.9 49.9
Diesel Range Organics (DRO)			87.3 50.0	65.8 50.0			<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)			<50.0 50.0	<50.0 50.0			<49.9 49.9
Total TPH			87.3 50.0	65.8 50.0			<49.9 49.9

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Certificate of Analysis Summary 667520



Tetra Tech- Midland, Midland, TX

Project Name: Solaris Booster Pump 1003

Project Id: 212C-MD-02236

Date Received in Lab: Fri 07.17.2020 11:28

Contact: Brittany Roberts

Report Date: 07.27.2020 13:18

Project Location: Eddy Co. NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667520-025	667520-026	667520-027	667520-028	667520-029	667520-030
	<i>Field Id:</i>	AH #10 (0-1')	AH #11 (0-1')	AH #11 (1-1.5')	AH #12 (0-1')	AH #12 (1-1.5')	AH #13 (0-1')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	07.24.2020 17:15	07.24.2020 17:15	07.24.2020 17:15	07.25.2020 08:00	07.25.2020 08:00	07.25.2020 08:00
	<i>Analyzed:</i>	07.25.2020 12:13	07.25.2020 12:34	07.25.2020 12:54	07.25.2020 16:08	07.25.2020 16:29	07.25.2020 16:49
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
m,p-Xylenes		<0.00396 0.00396	<0.00400 0.00400	<0.00399 0.00399	<0.00400 0.00400	<0.00398 0.00398	<0.00398 0.00398
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10
	<i>Analyzed:</i>	07.21.2020 04:07	07.21.2020 04:13	07.21.2020 04:32	07.21.2020 04:38	07.21.2020 04:44	07.21.2020 04:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1750 25.2	3440 25.0	6220 49.7	5710 50.5	5760 49.0	4530 24.8
TPH By SW8015 Mod	<i>Extracted:</i>	07.17.2020 12:00	07.17.2020 12:00	07.17.2020 12:00	07.17.2020 12:00	07.17.2020 16:00	07.17.2020 16:00
	<i>Analyzed:</i>	07.17.2020 20:45	07.17.2020 21:06	07.17.2020 21:28	07.17.2020 21:49	07.18.2020 00:38	07.18.2020 00:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	353 49.9	<50.0 50.0	62.8 50.0	66.1 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	70.6 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<49.8 49.8	<50.0 50.0	424 49.9	<50.0 50.0	62.8 50.0	66.1 49.9

BRL - Below Reporting Limit

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Certificate of Analysis Summary 667520

Tetra Tech- Midland, Midland, TX

Project Name: Solaris Booster Pump 1003

Project Id: 212C-MD-02236

Contact: Brittany Roberts

Project Location: Eddy Co. NM

Date Received in Lab: Fri 07.17.2020 11:28

Report Date: 07.27.2020 13:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667520-031	667520-032	667520-033	667520-034	667520-035	667520-036
	<i>Field Id:</i>	AH #13 (1-1.5')	AH #14 (0-1')	AH #14 (1-1.5')	AH #14 (2-2.5')	AH #14 (3-3.5')	AH #15 (0-1')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	07.25.2020 08:00	07.25.2020 08:00	07.25.2020 08:00			07.25.2020 08:00
	<i>Analyzed:</i>	07.25.2020 17:10	07.25.2020 17:31	07.25.2020 17:51			07.25.2020 18:12
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198			<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198			<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198			<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00400 0.00400	<0.00397 0.00397			<0.00399 0.00399
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198			<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198			<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198			<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:10	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35
	<i>Analyzed:</i>	07.21.2020 04:56	07.21.2020 05:03	07.21.2020 05:09	07.21.2020 17:41	07.21.2020 17:46	07.21.2020 17:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		9700 49.6	3620 24.9	4130 24.9	4470 25.2	4140 24.9	2500 25.0
TPH By SW8015 Mod	<i>Extracted:</i>	07.17.2020 16:00	07.17.2020 16:00	07.17.2020 16:00			07.17.2020 16:00
	<i>Analyzed:</i>	07.18.2020 01:20	07.18.2020 01:41	07.18.2020 02:02			07.18.2020 02:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8			<50.0 50.0
Diesel Range Organics (DRO)		134 50.0	62.2 49.9	<49.8 49.8			<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<49.8 49.8			<50.0 50.0
Total TPH		134 50.0	62.2 49.9	<49.8 49.8			<50.0 50.0

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Certificate of Analysis Summary 667520

Tetra Tech- Midland, Midland, TX

Project Name: Solaris Booster Pump 1003

Project Id: 212C-MD-02236

Contact: Brittany Roberts

Project Location: Eddy Co. NM

Date Received in Lab: Fri 07.17.2020 11:28

Report Date: 07.27.2020 13:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667520-037	667520-038	667520-039	667520-040	667520-041	667520-042
	<i>Field Id:</i>	AH #15 (1-1.5')	AH #15 (2-2.5')	AH #15 (3-3.5')	AH #16 (0-1')	AH #16 (1-1.5')	AH #16 (2-2.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	07.25.2020 08:00			07.25.2020 08:00	07.25.2020 08:00	
	<i>Analyzed:</i>	07.25.2020 18:32			07.25.2020 18:53	07.25.2020 19:13	
	<i>Units/RL:</i>	mg/kg RL			mg/kg RL	mg/kg RL	
Benzene		<0.00200 0.00200			<0.00201 0.00201	<0.00199 0.00199	
Toluene		<0.00200 0.00200			<0.00201 0.00201	<0.00199 0.00199	
Ethylbenzene		<0.00200 0.00200			<0.00201 0.00201	<0.00199 0.00199	
m,p-Xylenes		<0.00399 0.00399			<0.00402 0.00402	<0.00398 0.00398	
o-Xylene		<0.00200 0.00200			<0.00201 0.00201	<0.00199 0.00199	
Total Xylenes		<0.00200 0.00200			<0.00201 0.00201	<0.00199 0.00199	
Total BTEX		<0.00200 0.00200			<0.00201 0.00201	<0.00199 0.00199	
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35
	<i>Analyzed:</i>	07.21.2020 17:57	07.21.2020 18:12	07.21.2020 17:25	07.21.2020 18:18	07.21.2020 18:23	07.21.2020 18:28
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2540 25.0	2450 25.2	915 X 5.02	2790 24.9	4780 25.2	5050 25.2
TPH By SW8015 Mod	<i>Extracted:</i>	07.17.2020 16:00			07.17.2020 16:00	07.17.2020 16:00	
	<i>Analyzed:</i>	07.18.2020 02:44			07.18.2020 03:05	07.18.2020 03:25	
	<i>Units/RL:</i>	mg/kg RL			mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0			<49.8 49.8	<50.0 50.0	
Diesel Range Organics (DRO)		<50.0 50.0			<49.8 49.8	<50.0 50.0	
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0			<49.8 49.8	<50.0 50.0	
Total TPH		<50.0 50.0			<49.8 49.8	<50.0 50.0	

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Certificate of Analysis Summary 667520



Tetra Tech- Midland, Midland, TX

Project Name: Solaris Booster Pump 1003

Project Id: 212C-MD-02236

Date Received in Lab: Fri 07.17.2020 11:28

Contact: Brittany Roberts

Report Date: 07.27.2020 13:18

Project Location: Eddy Co. NM

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667520-043	667520-044	667520-045	667520-046	667520-047	667520-048
	<i>Field Id:</i>	Horizontal 1	Horizontal 2	Horizontal 3	Horizontal 4	Horizontal 5	Horizontal 6
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	07.25.2020 08:00	07.25.2020 08:00	07.25.2020 08:00	07.25.2020 08:00	07.25.2020 08:00	07.25.2020 08:00
	<i>Analyzed:</i>	07.25.2020 20:46	07.25.2020 21:07	07.25.2020 21:27	07.25.2020 21:48	07.25.2020 22:09	07.25.2020 22:29
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Toluene		0.00331 0.00199	0.00235 0.00198	<0.00200 0.00200	<0.00202 0.00202	0.00410 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00396 0.00396	<0.00399 0.00399	<0.00403 0.00403	0.00471 0.00401	<0.00397 0.00397
o-Xylene		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	0.00471 0.00200	<0.00198 0.00198
Total BTEX		0.00331 0.00199	0.00235 0.00198	<0.00200 0.00200	<0.00202 0.00202	0.00881 0.00200	<0.00198 0.00198
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	07.20.2020 12:10	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35
	<i>Analyzed:</i>	07.21.2020 03:49	07.21.2020 18:33	07.21.2020 18:39	07.21.2020 18:54	07.21.2020 19:15	07.21.2020 19:20
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		25.5 4.98	1180 24.9	652 X 5.03	16.8 4.96	19.6 4.95	126 4.98
TPH By SW8015 Mod	<i>Extracted:</i>	07.17.2020 16:00	07.17.2020 16:00	07.17.2020 16:00	07.17.2020 16:00	07.17.2020 16:00	07.17.2020 16:00
	<i>Analyzed:</i>	07.18.2020 04:07	07.18.2020 04:28	07.18.2020 04:49	07.18.2020 05:10	07.18.2020 05:31	07.18.2020 05:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.8 49.8	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.8 49.8	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.8 49.8	<49.9 49.9
Total TPH		<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.8 49.8	<49.9 49.9

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Certificate of Analysis Summary 667520

Tetra Tech- Midland, Midland, TX

Project Name: Solaris Booster Pump 1003

Project Id: 212C-MD-02236

Contact: Brittany Roberts

Project Location: Eddy Co. NM

Date Received in Lab: Fri 07.17.2020 11:28

Report Date: 07.27.2020 13:18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	667520-049	667520-050	667520-051	667520-052	667520-053	667520-054
	<i>Field Id:</i>	Horizontal 7	Horizontal 8	Horizontal 9	Horizontal 10	AH #16 (3-3.5)	AH #16 (4-4.5)
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00	07.15.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	07.25.2020 08:00	07.25.2020 08:00	07.25.2020 08:00	07.25.2020 08:00	07.26.2020 10:00	07.26.2020 10:00
	<i>Analyzed:</i>	07.25.2020 22:50	07.25.2020 23:10	07.25.2020 23:31	07.25.2020 23:51	07.26.2020 14:43	07.26.2020 15:03
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Toluene		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Ethylbenzene		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
m,p-Xylenes		<0.00404 0.00404	<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399	<0.00396 0.00396
o-Xylene		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Total Xylenes		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Total BTEX		<0.00202 0.00202	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35	07.20.2020 12:35
	<i>Analyzed:</i>	07.21.2020 18:59	07.21.2020 19:26	07.21.2020 19:31	07.21.2020 19:36	07.21.2020 19:41	07.21.2020 19:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		14.7 4.96	11.9 4.96	10.1 4.97	14.7 4.98	4380 24.8	4730 50.0
TPH By SW8015 Mod	<i>Extracted:</i>	07.17.2020 16:00	07.17.2020 16:00	07.17.2020 16:00	07.17.2020 16:00	07.20.2020 13:00	07.20.2020 13:00
	<i>Analyzed:</i>	07.18.2020 06:13	07.18.2020 06:34	07.18.2020 06:55	07.18.2020 07:15	07.20.2020 21:42	07.20.2020 22:01
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0

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Analytical Report 667520

for

Tetra Tech- Midland

Project Manager: Brittany Roberts

Solaris Booster Pump 1003

212C-MD-02236

07.27.2020

Collected By: Client



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

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

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

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



07.27.2020

Project Manager: **Brittany Roberts**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **667520**

Solaris Booster Pump 1003

Project Address: Eddy Co. NM

Brittany Roberts:

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) 667520. 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. 667520 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH #1 (0-1')	S	07.15.2020 00:00		667520-001
AH #1 (1-1.5')	S	07.15.2020 00:00		667520-002
AH #2 (0-1')	S	07.15.2020 00:00		667520-003
AH #2 (1-1.5')	S	07.15.2020 00:00		667520-004
AH #3 (0-1')	S	07.15.2020 00:00		667520-005
AH #3 (1-1.5')	S	07.15.2020 00:00		667520-006
AH #4 (0-1')	S	07.15.2020 00:00		667520-007
AH #4 (1-1.5')	S	07.15.2020 00:00		667520-008
AH #4 (2-2.5')	S	07.15.2020 00:00		667520-009
AH #4 (3-3.5')	S	07.15.2020 00:00		667520-010
AH #4 (4-4.5')	S	07.15.2020 00:00		667520-011
AH #5 (0-1')	S	07.15.2020 00:00		667520-012
AH #5 (1-1.5')	S	07.15.2020 00:00		667520-013
AH #6 (0-1')	S	07.15.2020 00:00		667520-014
AH #6 (1-1.5')	S	07.15.2020 00:00		667520-015
AH #6 (2-2.5')	S	07.15.2020 00:00		667520-016
AH #7 (0-1')	S	07.15.2020 00:00		667520-017
AH #7 (1-1.5')	S	07.15.2020 00:00		667520-018
AH #7 (2-2.5')	S	07.15.2020 00:00		667520-019
AH #8 (0-1')	S	07.15.2020 00:00		667520-020
AH #8 (1-1.5')	S	07.15.2020 00:00		667520-021
AH #8 (2-2.5')	S	07.15.2020 00:00		667520-022
AH #8 (3-3.5')	S	07.15.2020 00:00		667520-023
AH #9 (0-1')	S	07.15.2020 00:00		667520-024
AH #10 (0-1')	S	07.15.2020 00:00		667520-025
AH #11 (0-1')	S	07.15.2020 00:00		667520-026
AH #11 (1-1.5')	S	07.15.2020 00:00		667520-027
AH #12 (0-1')	S	07.15.2020 00:00		667520-028
AH #12 (1-1.5')	S	07.15.2020 00:00		667520-029
AH #13 (0-1')	S	07.15.2020 00:00		667520-030
AH #13 (1-1.5')	S	07.15.2020 00:00		667520-031
AH #14 (0-1')	S	07.15.2020 00:00		667520-032
AH #14 (1-1.5')	S	07.15.2020 00:00		667520-033
AH #14 (2-2.5')	S	07.15.2020 00:00		667520-034
AH #14 (3-3.5')	S	07.15.2020 00:00		667520-035
AH #15 (0-1')	S	07.15.2020 00:00		667520-036
AH #15 (1-1.5')	S	07.15.2020 00:00		667520-037
AH #15 (2-2.5')	S	07.15.2020 00:00		667520-038
AH #15 (3-3.5')	S	07.15.2020 00:00		667520-039
AH #16 (0-1')	S	07.15.2020 00:00		667520-040
AH #16 (1-1.5')	S	07.15.2020 00:00		667520-041
AH #16 (2-2.5')	S	07.15.2020 00:00		667520-042
Horizontal 1	S	07.15.2020 00:00		667520-043

**Sample Cross Reference 667520****Tetra Tech- Midland, Midland, TX****Solaris Booster Pump 1003**

Horizontal 2	S	07.15.2020 00:00	667520-044
Horizontal 3	S	07.15.2020 00:00	667520-045
Horizontal 4	S	07.15.2020 00:00	667520-046
Horizontal 5	S	07.15.2020 00:00	667520-047
Horizontal 6	S	07.15.2020 00:00	667520-048
Horizontal 7	S	07.15.2020 00:00	667520-049
Horizontal 8	S	07.15.2020 00:00	667520-050
Horizontal 9	S	07.15.2020 00:00	667520-051
Horizontal 10	S	07.15.2020 00:00	667520-052
AH #16 (3-3.5)	S	07.15.2020 00:00	667520-053
AH #16 (4-4.5)	S	07.15.2020 00:00	667520-054

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Solaris Booster Pump 1003**Project ID: 212C-MD-02236
Work Order Number(s): 667520Report Date: 07.27.2020
Date Received: 07.17.2020**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3132192 TPH By SW8015 Mod

Surrogate 1-Chlorooctane recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7707723-1-BKS.

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7707723-1-BLK.

Batch: LBA-3132249 Inorganic Anions by EPA 300/300.1

Lab Sample ID 667520-045 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: 667520-034, -035, -036, -037, -038, -039, -040, -041, -042, -044, -045, -046, -047, -048, -049, -050, -051, -052, -053, -054.

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

Batch: LBA-3132601 BTEX by EPA 8021B

Lab Sample ID 667520-012 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene 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: 667520-001, -002, -003, -004, -005, -006, -007, -008, -012, -013, -014, -015, -017, -018, -020, -021, -024, -025, -026, -027.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #1 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-001

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	62.7	4.96	mg/kg	07.21.2020 15:35		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 13:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 13:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 13:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 13:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	07.17.2020 13:52	
o-Terphenyl	84-15-1	91	%	70-130	07.17.2020 13:52	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #1 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-001

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 05:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 05:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 05:23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.25.2020 05:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 05:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 05:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 05:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.25.2020 05:23		
1,4-Difluorobenzene	540-36-3	116	%	70-130	07.25.2020 05:23		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #1 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-002

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.3	5.03	mg/kg	07.21.2020 15:46		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 14:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 14:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 14:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 14:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	07.17.2020 14:57	
o-Terphenyl	84-15-1	94	%	70-130	07.17.2020 14:57	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #1 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-002

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.25.2020 05:44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.25.2020 05:44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.25.2020 05:44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.25.2020 05:44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.25.2020 05:44	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.25.2020 05:44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.25.2020 05:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	122	%	70-130	07.25.2020 05:44		
1,4-Difluorobenzene	540-36-3	108	%	70-130	07.25.2020 05:44		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #2 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-003

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.2	5.04	mg/kg	07.21.2020 15:25		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.17.2020 15:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.17.2020 15:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.17.2020 15:19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.17.2020 15:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	07.17.2020 15:19	
o-Terphenyl	84-15-1	93	%	70-130	07.17.2020 15:19	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #2 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-003

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.25.2020 06:04	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.25.2020 06:04	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.25.2020 06:04	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	07.25.2020 06:04	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.25.2020 06:04	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.25.2020 06:04	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.25.2020 06:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	119	%	70-130	07.25.2020 06:04		
1,4-Difluorobenzene	540-36-3	108	%	70-130	07.25.2020 06:04		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #2 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-004

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	71.8	5.02	mg/kg	07.21.2020 15:30		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 15:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 15:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 15:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 15:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	07.17.2020 15:41	
o-Terphenyl	84-15-1	94	%	70-130	07.17.2020 15:41	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #2 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-004

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 06:25	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 06:25	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 06:25	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 06:25	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 06:25	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 06:25	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 06:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	122	%	70-130	07.25.2020 06:25		
1,4-Difluorobenzene	540-36-3	106	%	70-130	07.25.2020 06:25		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #3 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-005

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5350	49.5	mg/kg	07.21.2020 15:41		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 16:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 16:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 16:03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 16:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	07.17.2020 16:03	
o-Terphenyl	84-15-1	103	%	70-130	07.17.2020 16:03	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #3 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-005

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 06:45	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 06:45	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 06:45	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 06:45	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 06:45	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 06:45	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 06:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	07.25.2020 06:45		
4-Bromofluorobenzene	460-00-4	122	%	70-130	07.25.2020 06:45		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #3 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-006

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5800	49.6	mg/kg	07.21.2020 16:02		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.17.2020 16:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.17.2020 16:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.17.2020 16:24	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.17.2020 16:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	07.17.2020 16:24	
o-Terphenyl	84-15-1	102	%	70-130	07.17.2020 16:24	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #3 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-006

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 07:05	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 07:05	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 07:05	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 07:05	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 07:05	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 07:05	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 07:05	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	115	%	70-130	07.25.2020 07:05		
1,4-Difluorobenzene	540-36-3	107	%	70-130	07.25.2020 07:05		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #4 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-007

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1680	24.8	mg/kg	07.21.2020 16:07		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 16:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 16:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 16:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 16:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	07.17.2020 16:46	
o-Terphenyl	84-15-1	101	%	70-130	07.17.2020 16:46	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #4 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-007

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 07:26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 07:26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 07:26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 07:26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 07:26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 07:26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 07:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	07.25.2020 07:26		
4-Bromofluorobenzene	460-00-4	125	%	70-130	07.25.2020 07:26		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: AH #4 (1-1.5')

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-008

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4770	25.1	mg/kg	07.21.2020 16:23		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 17:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 17:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 17:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 17:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	07.17.2020 17:08	
o-Terphenyl	84-15-1	103	%	70-130	07.17.2020 17:08	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #4 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-008

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.25.2020 07:46	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.25.2020 07:46	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.25.2020 07:46	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	07.25.2020 07:46	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.25.2020 07:46	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.25.2020 07:46	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.25.2020 07:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	129	%	70-130	07.25.2020 07:46		
1,4-Difluorobenzene	540-36-3	108	%	70-130	07.25.2020 07:46		

**Certificate of Analytical Results 667520****Tetra Tech- Midland, Midland, TX**

Solaris Booster Pump 1003

Sample Id: **AH #4 (2-2.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-009

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	661	4.98	mg/kg	07.21.2020 16:28		1



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: AH #4 (3-3.5')

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-010

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1410	5.00	mg/kg	07.21.2020 16:33		1

**Certificate of Analytical Results 667520****Tetra Tech- Midland, Midland, TX**

Solaris Booster Pump 1003

Sample Id: **AH #4 (4-4.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-011

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	180	5.00	mg/kg	07.21.2020 16:38		1



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #5 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-012

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.9	4.96	mg/kg	07.21.2020 16:44		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.17.2020 17:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.17.2020 17:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.17.2020 17:30	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.17.2020 17:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	07.17.2020 17:30	
o-Terphenyl	84-15-1	98	%	70-130	07.17.2020 17:30	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #5 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-012

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.25.2020 08:07	UX	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.25.2020 08:07	UX	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.25.2020 08:07	UX	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.25.2020 08:07	UX	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.25.2020 08:07	UX	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.25.2020 08:07	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.25.2020 08:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	07.25.2020 08:07		
4-Bromofluorobenzene	460-00-4	115	%	70-130	07.25.2020 08:07		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #5 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-013

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.5	4.97	mg/kg	07.21.2020 16:49		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.17.2020 17:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.17.2020 17:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.17.2020 17:51	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.17.2020 17:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	07.17.2020 17:51	
o-Terphenyl	84-15-1	89	%	70-130	07.17.2020 17:51	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #5 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-013

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 08:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 08:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 08:27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.25.2020 08:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 08:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 08:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 08:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	120	%	70-130	07.25.2020 08:27		
1,4-Difluorobenzene	540-36-3	109	%	70-130	07.25.2020 08:27		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #6 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-014

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:15

Basis: Wet Weight

Seq Number: 3132248

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3490	25.0	mg/kg	07.21.2020 16:54		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 18:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 18:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 18:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 18:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	07.17.2020 18:35	
o-Terphenyl	84-15-1	100	%	70-130	07.17.2020 18:35	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #6 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-014

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.25.2020 09:49	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.25.2020 09:49	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.25.2020 09:49	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.25.2020 09:49	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.25.2020 09:49	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.25.2020 09:49	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.25.2020 09:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	115	%	70-130	07.25.2020 09:49		
1,4-Difluorobenzene	540-36-3	103	%	70-130	07.25.2020 09:49		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #6 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-015

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4850	25.2	mg/kg	07.21.2020 02:41		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.17.2020 18:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.17.2020 18:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.17.2020 18:57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.17.2020 18:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	07.17.2020 18:57	
o-Terphenyl	84-15-1	101	%	70-130	07.17.2020 18:57	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #6 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-015

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.25.2020 10:10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.25.2020 10:10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.25.2020 10:10	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	07.25.2020 10:10	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.25.2020 10:10	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.25.2020 10:10	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.25.2020 10:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	126	%	70-130	07.25.2020 10:10		
1,4-Difluorobenzene	540-36-3	107	%	70-130	07.25.2020 10:10		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: AH #6 (2-2.5')

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-016

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4890	50.4	mg/kg	07.21.2020 02:47		10



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #7 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-017

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1520	25.0	mg/kg	07.21.2020 02:53		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.17.2020 19:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.17.2020 19:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.17.2020 19:19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.17.2020 19:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	07.17.2020 19:19	
o-Terphenyl	84-15-1	108	%	70-130	07.17.2020 19:19	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #7 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-017

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.25.2020 10:30	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.25.2020 10:30	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.25.2020 10:30	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	07.25.2020 10:30	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.25.2020 10:30	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.25.2020 10:30	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.25.2020 10:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	07.25.2020 10:30		
1,4-Difluorobenzene	540-36-3	111	%	70-130	07.25.2020 10:30		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #7 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-018

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1730	25.2	mg/kg	07.21.2020 03:00		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 19:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 19:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 19:40	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 19:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	07.17.2020 19:40	
o-Terphenyl	84-15-1	98	%	70-130	07.17.2020 19:40	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #7 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-018

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 10:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 10:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 10:51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.25.2020 10:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 10:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 10:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 10:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	07.25.2020 10:51	
4-Bromofluorobenzene	460-00-4	112	%	70-130	07.25.2020 10:51	

**Certificate of Analytical Results 667520****Tetra Tech- Midland, Midland, TX**

Solaris Booster Pump 1003

Sample Id: **AH #7 (2-2.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-019

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1380	25.2	mg/kg	07.21.2020 03:18		5



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #8 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-020

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3900	25.3	mg/kg	07.21.2020 03:24		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 20:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	87.3	50.0	mg/kg	07.17.2020 20:02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 20:02	U	1
Total TPH	PHC635	87.3	50.0	mg/kg	07.17.2020 20:02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	07.17.2020 20:02	
o-Terphenyl	84-15-1	98	%	70-130	07.17.2020 20:02	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #8 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-020

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 11:11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 11:11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 11:11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 11:11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 11:11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 11:11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 11:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	07.25.2020 11:11		
1,4-Difluorobenzene	540-36-3	110	%	70-130	07.25.2020 11:11		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #8 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-021

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4430	25.1	mg/kg	07.21.2020 03:30		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 23:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	65.8	50.0	mg/kg	07.17.2020 23:35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 23:35	U	1
Total TPH	PHC635	65.8	50.0	mg/kg	07.17.2020 23:35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	07.17.2020 23:35	
o-Terphenyl	84-15-1	89	%	70-130	07.17.2020 23:35	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #8 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-021

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 11:32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 11:32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 11:32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 11:32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 11:32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 11:32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 11:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	07.25.2020 11:32		
1,4-Difluorobenzene	540-36-3	110	%	70-130	07.25.2020 11:32		

**Certificate of Analytical Results 667520****Tetra Tech- Midland, Midland, TX**

Solaris Booster Pump 1003

Sample Id: **AH #8 (2-2.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-022

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5160	49.5	mg/kg	07.21.2020 03:36		10



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: AH #8 (3-3.5')

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-023

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4870	49.5	mg/kg	07.21.2020 03:43		10



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #9 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-024

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	225	4.98	mg/kg	07.21.2020 02:23		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.17.2020 20:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.17.2020 20:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.17.2020 20:23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.17.2020 20:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	07.17.2020 20:23	
o-Terphenyl	84-15-1	91	%	70-130	07.17.2020 20:23	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #9 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-024

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 11:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 11:52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 11:52	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.25.2020 11:52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 11:52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 11:52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 11:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	07.25.2020 11:52		
1,4-Difluorobenzene	540-36-3	105	%	70-130	07.25.2020 11:52		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #10 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-025

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1750	25.2	mg/kg	07.21.2020 04:07		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.17.2020 20:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.17.2020 20:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.17.2020 20:45	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.17.2020 20:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	07.17.2020 20:45	
o-Terphenyl	84-15-1	97	%	70-130	07.17.2020 20:45	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #10 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-025

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.25.2020 12:13	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.25.2020 12:13	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.25.2020 12:13	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	07.25.2020 12:13	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.25.2020 12:13	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.25.2020 12:13	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.25.2020 12:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	07.25.2020 12:13		
4-Bromofluorobenzene	460-00-4	118	%	70-130	07.25.2020 12:13		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #11 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-026

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3440	25.0	mg/kg	07.21.2020 04:13		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 21:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 21:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 21:06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 21:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	07.17.2020 21:06	
o-Terphenyl	84-15-1	92	%	70-130	07.17.2020 21:06	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #11 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-026

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 12:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 12:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 12:34	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.25.2020 12:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 12:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 12:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 12:34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	115	%	70-130	07.25.2020 12:34		
1,4-Difluorobenzene	540-36-3	110	%	70-130	07.25.2020 12:34		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #11 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-027

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6220	49.7	mg/kg	07.21.2020 04:32		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.17.2020 21:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	353	49.9	mg/kg	07.17.2020 21:28		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	70.6	49.9	mg/kg	07.17.2020 21:28		1
Total TPH	PHC635	424	49.9	mg/kg	07.17.2020 21:28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	07.17.2020 21:28	
o-Terphenyl	84-15-1	101	%	70-130	07.17.2020 21:28	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #11 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-027

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.24.2020 17:15

Basis: Wet Weight

Seq Number: 3132601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 12:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 12:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 12:54	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.25.2020 12:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 12:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 12:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 12:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	07.25.2020 12:54		
4-Bromofluorobenzene	460-00-4	113	%	70-130	07.25.2020 12:54		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #12 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-028

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5710	50.5	mg/kg	07.21.2020 04:38		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 12:00

Basis: Wet Weight

Seq Number: 3132037

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.17.2020 21:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.17.2020 21:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.17.2020 21:49	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.17.2020 21:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	07.17.2020 21:49	
o-Terphenyl	84-15-1	96	%	70-130	07.17.2020 21:49	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #12 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-028

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 16:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 16:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 16:08	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.25.2020 16:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 16:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 16:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 16:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	07.25.2020 16:08		
1,4-Difluorobenzene	540-36-3	108	%	70-130	07.25.2020 16:08		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #12 (1-1.5')** Matrix: Soil Date Received: 07.17.2020 11:28
 Lab Sample Id: 667520-029 Date Collected: 07.15.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.20.2020 12:10 Basis: Wet Weight
 Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5760	49.0	mg/kg	07.21.2020 04:44		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.17.2020 16:00 Basis: Wet Weight
 Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.18.2020 00:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	62.8	50.0	mg/kg	07.18.2020 00:38		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.18.2020 00:38	U	1
Total TPH	PHC635	62.8	50.0	mg/kg	07.18.2020 00:38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	07.18.2020 00:38	
o-Terphenyl	84-15-1	88	%	70-130	07.18.2020 00:38	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #12 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-029

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 16:29	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 16:29	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 16:29	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 16:29	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 16:29	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 16:29	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 16:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	07.25.2020 16:29		
4-Bromofluorobenzene	460-00-4	117	%	70-130	07.25.2020 16:29		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #13 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-030

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4530	24.8	mg/kg	07.21.2020 04:50		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.18.2020 00:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	66.1	49.9	mg/kg	07.18.2020 00:59		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.18.2020 00:59	U	1
Total TPH	PHC635	66.1	49.9	mg/kg	07.18.2020 00:59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	07.18.2020 00:59	
o-Terphenyl	84-15-1	85	%	70-130	07.18.2020 00:59	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #13 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-030

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 16:49	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 16:49	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 16:49	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 16:49	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 16:49	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 16:49	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 16:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	07.25.2020 16:49		
1,4-Difluorobenzene	540-36-3	107	%	70-130	07.25.2020 16:49		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #13 (1-1.5')** Matrix: Soil Date Received: 07.17.2020 11:28
 Lab Sample Id: 667520-031 Date Collected: 07.15.2020 00:00
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 07.20.2020 12:10 Basis: Wet Weight
 Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9700	49.6	mg/kg	07.21.2020 04:56		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 07.17.2020 16:00 Basis: Wet Weight
 Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.18.2020 01:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	134	50.0	mg/kg	07.18.2020 01:20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.18.2020 01:20	U	1
Total TPH	PHC635	134	50.0	mg/kg	07.18.2020 01:20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	07.18.2020 01:20	
o-Terphenyl	84-15-1	87	%	70-130	07.18.2020 01:20	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #13 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-031

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 17:10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 17:10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 17:10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 17:10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 17:10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 17:10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 17:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	07.25.2020 17:10		
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.25.2020 17:10		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #14 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-032

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3620	24.9	mg/kg	07.21.2020 05:03		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.18.2020 01:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	62.2	49.9	mg/kg	07.18.2020 01:41		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.18.2020 01:41	U	1
Total TPH	PHC635	62.2	49.9	mg/kg	07.18.2020 01:41		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	07.18.2020 01:41	
o-Terphenyl	84-15-1	86	%	70-130	07.18.2020 01:41	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #14 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-032

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 17:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 17:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 17:31	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.25.2020 17:31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 17:31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 17:31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 17:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	07.25.2020 17:31	
4-Bromofluorobenzene	460-00-4	116	%	70-130	07.25.2020 17:31	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #14 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-033

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4130	24.9	mg/kg	07.21.2020 05:09		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.18.2020 02:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.18.2020 02:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.18.2020 02:02	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.18.2020 02:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	07.18.2020 02:02	
o-Terphenyl	84-15-1	86	%	70-130	07.18.2020 02:02	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #14 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-033

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.25.2020 17:51	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.25.2020 17:51	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.25.2020 17:51	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	07.25.2020 17:51	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.25.2020 17:51	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.25.2020 17:51	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.25.2020 17:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	07.25.2020 17:51		
1,4-Difluorobenzene	540-36-3	113	%	70-130	07.25.2020 17:51		

**Certificate of Analytical Results 667520****Tetra Tech- Midland, Midland, TX**

Solaris Booster Pump 1003

Sample Id: **AH #14 (2-2.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-034

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4470	25.2	mg/kg	07.21.2020 17:41		5



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: AH #14 (3-3.5')

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-035

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4140	24.9	mg/kg	07.21.2020 17:46		5



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #15 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-036

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2500	25.0	mg/kg	07.21.2020 17:52		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.18.2020 02:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.18.2020 02:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.18.2020 02:23	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.18.2020 02:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	07.18.2020 02:23	
o-Terphenyl	84-15-1	81	%	70-130	07.18.2020 02:23	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #15 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-036

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 18:12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 18:12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 18:12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.25.2020 18:12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 18:12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 18:12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 18:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	07.25.2020 18:12		
1,4-Difluorobenzene	540-36-3	110	%	70-130	07.25.2020 18:12		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #15 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-037

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2540	25.0	mg/kg	07.21.2020 17:57		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.18.2020 02:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.18.2020 02:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.18.2020 02:44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.18.2020 02:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	07.18.2020 02:44	
o-Terphenyl	84-15-1	82	%	70-130	07.18.2020 02:44	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #15 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-037

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 18:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 18:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 18:32	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.25.2020 18:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 18:32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 18:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 18:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	120	%	70-130	07.25.2020 18:32		
1,4-Difluorobenzene	540-36-3	109	%	70-130	07.25.2020 18:32		



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Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: AH #15 (2-2.5')

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-038

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2450	25.2	mg/kg	07.21.2020 18:12		5

**Certificate of Analytical Results 667520****Tetra Tech- Midland, Midland, TX**

Solaris Booster Pump 1003

Sample Id: **AH #15 (3-3.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-039

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	915	5.02	mg/kg	07.21.2020 17:25	X	1



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #16 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-040

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2790	24.9	mg/kg	07.21.2020 18:18		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.18.2020 03:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.18.2020 03:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.18.2020 03:05	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.18.2020 03:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	07.18.2020 03:05	
o-Terphenyl	84-15-1	82	%	70-130	07.18.2020 03:05	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #16 (0-1')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-040

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.25.2020 18:53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.25.2020 18:53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.25.2020 18:53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.25.2020 18:53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.25.2020 18:53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.25.2020 18:53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.25.2020 18:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	07.25.2020 18:53		
1,4-Difluorobenzene	540-36-3	109	%	70-130	07.25.2020 18:53		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #16 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-041

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4780	25.2	mg/kg	07.21.2020 18:23		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.18.2020 03:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.18.2020 03:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.18.2020 03:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.18.2020 03:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	07.18.2020 03:25	
o-Terphenyl	84-15-1	90	%	70-130	07.18.2020 03:25	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #16 (1-1.5')**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-041

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 19:13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 19:13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 19:13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 19:13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 19:13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 19:13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 19:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	07.25.2020 19:13		
4-Bromofluorobenzene	460-00-4	121	%	70-130	07.25.2020 19:13		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: AH #16 (2-2.5')

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-042

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5050	25.2	mg/kg	07.21.2020 18:28		5



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 1**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-043

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:10

Basis: Wet Weight

Seq Number: 3132169

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.5	4.98	mg/kg	07.21.2020 03:49		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.18.2020 04:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.18.2020 04:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.18.2020 04:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.18.2020 04:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	07.18.2020 04:07	
o-Terphenyl	84-15-1	85	%	70-130	07.18.2020 04:07	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 1**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-043

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 20:46	U	1
Toluene	108-88-3	0.00331	0.00199	mg/kg	07.25.2020 20:46		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 20:46	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 20:46	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 20:46	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 20:46	U	1
Total BTEX		0.00331	0.00199	mg/kg	07.25.2020 20:46		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	07.25.2020 20:46		
1,4-Difluorobenzene	540-36-3	111	%	70-130	07.25.2020 20:46		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 2**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-044

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1180	24.9	mg/kg	07.21.2020 18:33		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.18.2020 04:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.18.2020 04:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.18.2020 04:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.18.2020 04:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	07.18.2020 04:28	
o-Terphenyl	84-15-1	78	%	70-130	07.18.2020 04:28	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 2**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-044

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.25.2020 21:07	U	1
Toluene	108-88-3	0.00235	0.00198	mg/kg	07.25.2020 21:07		1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.25.2020 21:07	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	07.25.2020 21:07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.25.2020 21:07	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.25.2020 21:07	U	1
Total BTEX		0.00235	0.00198	mg/kg	07.25.2020 21:07		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	07.25.2020 21:07		
1,4-Difluorobenzene	540-36-3	113	%	70-130	07.25.2020 21:07		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 3**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-045

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	652	5.03	mg/kg	07.21.2020 18:39	X	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.18.2020 04:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.18.2020 04:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.18.2020 04:49	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.18.2020 04:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	07.18.2020 04:49	
o-Terphenyl	84-15-1	83	%	70-130	07.18.2020 04:49	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 3**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-045

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 21:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 21:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 21:27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.25.2020 21:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 21:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 21:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 21:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	07.25.2020 21:27		
4-Bromofluorobenzene	460-00-4	108	%	70-130	07.25.2020 21:27		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 4**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-046

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.8	4.96	mg/kg	07.21.2020 18:54		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.18.2020 05:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.18.2020 05:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.18.2020 05:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.18.2020 05:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	07.18.2020 05:10	
o-Terphenyl	84-15-1	85	%	70-130	07.18.2020 05:10	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 4**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-046

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.25.2020 21:48	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.25.2020 21:48	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.25.2020 21:48	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	07.25.2020 21:48	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.25.2020 21:48	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.25.2020 21:48	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.25.2020 21:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	116	%	70-130	07.25.2020 21:48		
4-Bromofluorobenzene	460-00-4	110	%	70-130	07.25.2020 21:48		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 5**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-047

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.6	4.95	mg/kg	07.21.2020 19:15		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.18.2020 05:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.18.2020 05:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.18.2020 05:31	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.18.2020 05:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	07.18.2020 05:31	
o-Terphenyl	84-15-1	83	%	70-130	07.18.2020 05:31	



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Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 5**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-047

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 22:09	U	1
Toluene	108-88-3	0.00410	0.00200	mg/kg	07.25.2020 22:09		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 22:09	U	1
m,p-Xylenes	179601-23-1	0.00471	0.00401	mg/kg	07.25.2020 22:09		1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 22:09	U	1
Total Xylenes	1330-20-7	0.00471	0.00200	mg/kg	07.25.2020 22:09		1
Total BTEX		0.00881	0.00200	mg/kg	07.25.2020 22:09		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	07.25.2020 22:09		
4-Bromofluorobenzene	460-00-4	120	%	70-130	07.25.2020 22:09		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 6**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-048

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	126	4.98	mg/kg	07.21.2020 19:20		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.18.2020 05:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.18.2020 05:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.18.2020 05:52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.18.2020 05:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	07.18.2020 05:52	
o-Terphenyl	84-15-1	88	%	70-130	07.18.2020 05:52	



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Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 6**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-048

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.25.2020 22:29	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.25.2020 22:29	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.25.2020 22:29	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	07.25.2020 22:29	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.25.2020 22:29	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.25.2020 22:29	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.25.2020 22:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.25.2020 22:29		
4-Bromofluorobenzene	460-00-4	123	%	70-130	07.25.2020 22:29		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 7**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-049

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.7	4.96	mg/kg	07.21.2020 18:59		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.18.2020 06:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.18.2020 06:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.18.2020 06:13	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.18.2020 06:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	07.18.2020 06:13	
o-Terphenyl	84-15-1	89	%	70-130	07.18.2020 06:13	



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Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 7**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-049

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	07.25.2020 22:50	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	07.25.2020 22:50	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	07.25.2020 22:50	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	07.25.2020 22:50	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	07.25.2020 22:50	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	07.25.2020 22:50	U	1
Total BTEX		<0.00202	0.00202	mg/kg	07.25.2020 22:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	07.25.2020 22:50		
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.25.2020 22:50		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 8**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-050

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.9	4.96	mg/kg	07.21.2020 19:26		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.18.2020 06:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.18.2020 06:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.18.2020 06:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.18.2020 06:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	07.18.2020 06:34	
o-Terphenyl	84-15-1	84	%	70-130	07.18.2020 06:34	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 8**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-050

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 23:10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 23:10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 23:10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 23:10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 23:10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 23:10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 23:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	07.25.2020 23:10		
1,4-Difluorobenzene	540-36-3	113	%	70-130	07.25.2020 23:10		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 9**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-051

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.1	4.97	mg/kg	07.21.2020 19:31		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.18.2020 06:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.18.2020 06:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.18.2020 06:55	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.18.2020 06:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	07.18.2020 06:55	
o-Terphenyl	84-15-1	84	%	70-130	07.18.2020 06:55	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 9**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-051

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 23:31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 23:31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 23:31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 23:31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 23:31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 23:31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 23:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	07.25.2020 23:31		
4-Bromofluorobenzene	460-00-4	111	%	70-130	07.25.2020 23:31		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 10**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-052

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.7	4.98	mg/kg	07.21.2020 19:36		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.17.2020 16:00

Basis: Wet Weight

Seq Number: 3132042

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.18.2020 07:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.18.2020 07:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.18.2020 07:15	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.18.2020 07:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	07.18.2020 07:15	
o-Terphenyl	84-15-1	86	%	70-130	07.18.2020 07:15	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **Horizontal 10**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-052

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.25.2020 08:00

Basis: Wet Weight

Seq Number: 3132604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.2020 23:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.2020 23:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.2020 23:51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.25.2020 23:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.2020 23:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.2020 23:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.2020 23:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	07.25.2020 23:51		
4-Bromofluorobenzene	460-00-4	110	%	70-130	07.25.2020 23:51		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #16 (3-3.5)**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-053

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4380	24.8	mg/kg	07.21.2020 19:41		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.20.2020 13:00

Basis: Wet Weight

Seq Number: 3132192

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.20.2020 21:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.20.2020 21:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.20.2020 21:42	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.20.2020 21:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-130	07.20.2020 21:42	
o-Terphenyl	84-15-1	126	%	70-130	07.20.2020 21:42	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #16 (3-3.5)**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-053

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.26.2020 10:00

Basis: Wet Weight

Seq Number: 3132650

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.26.2020 14:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.26.2020 14:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.26.2020 14:43	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.26.2020 14:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.26.2020 14:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.26.2020 14:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.26.2020 14:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	07.26.2020 14:43		
1,4-Difluorobenzene	540-36-3	112	%	70-130	07.26.2020 14:43		



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: AH #16 (4-4.5)

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-054

Date Collected: 07.15.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 12:35

Basis: Wet Weight

Seq Number: 3132249

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4730	50.0	mg/kg	07.21.2020 19:46		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.20.2020 13:00

Basis: Wet Weight

Seq Number: 3132192

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.20.2020 22:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.20.2020 22:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.20.2020 22:01	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.20.2020 22:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	07.20.2020 22:01	
o-Terphenyl	84-15-1	102	%	70-130	07.20.2020 22:01	



Certificate of Analytical Results 667520

Tetra Tech- Midland, Midland, TX

Solaris Booster Pump 1003

Sample Id: **AH #16 (4-4.5)**

Matrix: Soil

Date Received: 07.17.2020 11:28

Lab Sample Id: 667520-054

Date Collected: 07.15.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.26.2020 10:00

Basis: Wet Weight

Seq Number: 3132650

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.26.2020 15:03	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.26.2020 15:03	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.26.2020 15:03	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	07.26.2020 15:03	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.26.2020 15:03	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.26.2020 15:03	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.26.2020 15:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	07.26.2020 15:03		
1,4-Difluorobenzene	540-36-3	112	%	70-130	07.26.2020 15:03		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Tetra Tech- Midland

Solaris Booster Pump 1003

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132248

Matrix: Solid

Prep Method: E300P

Date Prep: 07.20.2020

MB Sample Id: 7707670-1-BLK

LCS Sample Id: 7707670-1-BKS

LCSD Sample Id: 7707670-1-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	245	98	244	98	90-110	0	20	mg/kg	07.21.2020 14:22	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132169

Matrix: Solid

Prep Method: E300P

Date Prep: 07.20.2020

MB Sample Id: 7707671-1-BLK

LCS Sample Id: 7707671-1-BKS

LCSD Sample Id: 7707671-1-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	250	100	250	100	90-110	0	20	mg/kg	07.21.2020 02:10	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132249

Matrix: Solid

Prep Method: E300P

Date Prep: 07.20.2020

MB Sample Id: 7707674-1-BLK

LCS Sample Id: 7707674-1-BKS

LCSD Sample Id: 7707674-1-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	263	105	275	110	90-110	4	20	mg/kg	07.21.2020 17:15	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132248

Matrix: Soil

Prep Method: E300P

Date Prep: 07.20.2020

Parent Sample Id: 667516-001

MS Sample Id: 667516-001 S

MSD Sample Id: 667516-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	414	248	632	88	659	99	90-110	4	20	mg/kg	07.21.2020 14:38	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132248

Matrix: Soil

Prep Method: E300P

Date Prep: 07.20.2020

Parent Sample Id: 667520-002

MS Sample Id: 667520-002 S

MSD Sample Id: 667520-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	39.3	252	291	100	299	103	90-110	3	20	mg/kg	07.21.2020 15:51	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132169

Matrix: Soil

Prep Method: E300P

Date Prep: 07.20.2020

Parent Sample Id: 667520-024

MS Sample Id: 667520-024 S

MSD Sample Id: 667520-024 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	225	249	472	99	476	101	90-110	1	20	mg/kg	07.21.2020 02:29	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Tetra Tech- Midland

Solaris Booster Pump 1003

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132169

Matrix: Soil

Prep Method: E300P

Date Prep: 07.20.2020

Parent Sample Id: 667520-043

MS Sample Id: 667520-043 S

MSD Sample Id: 667520-043 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	25.5	249	282	103	282	103	90-110	0	20	mg/kg	07.21.2020 03:55	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132249

Matrix: Soil

Prep Method: E300P

Date Prep: 07.20.2020

Parent Sample Id: 667520-039

MS Sample Id: 667520-039 S

MSD Sample Id: 667520-039 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	915	251	1110	78	1130	86	90-110	2	20	mg/kg	07.21.2020 17:31	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3132249

Matrix: Soil

Prep Method: E300P

Date Prep: 07.20.2020

Parent Sample Id: 667520-045

MS Sample Id: 667520-045 S

MSD Sample Id: 667520-045 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	652	252	936	113	870	87	90-110	7	20	mg/kg	07.21.2020 18:44	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3132037

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.17.2020

MB Sample Id: 7707616-1-BLK

LCS Sample Id: 7707616-1-BKS

LCSD Sample Id: 7707616-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	842	84	838	84	70-130	0	20	mg/kg	07.17.2020 13:08	
Diesel Range Organics (DRO)	<50.0	1000	868	87	894	89	70-130	3	20	mg/kg	07.17.2020 13:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		86		88		70-130	%	07.17.2020 13:08
o-Terphenyl	97		89		93		70-130	%	07.17.2020 13:08

Analytical Method: TPH By SW8015 Mod

Seq Number: 3132042

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.17.2020

MB Sample Id: 7707621-1-BLK

LCS Sample Id: 7707621-1-BKS

LCSD Sample Id: 7707621-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	920	92	858	86	70-130	7	20	mg/kg	07.17.2020 22:52	
Diesel Range Organics (DRO)	<50.0	1000	877	88	864	86	70-130	1	20	mg/kg	07.17.2020 22:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		101		98		70-130	%	07.17.2020 22:52
o-Terphenyl	94		93		87		70-130	%	07.17.2020 22:52

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Tetra Tech- Midland

Solaris Booster Pump 1003

Analytical Method: TPH By SW8015 Mod

Seq Number: 3132192

MB Sample Id: 7707723-1-BLK

Matrix: Solid

LCS Sample Id: 7707723-1-BKS

Prep Method: SW8015P

Date Prep: 07.20.2020

LCSD Sample Id: 7707723-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1020	102	941	94	70-130	8	20	mg/kg	07.20.2020 17:36	
Diesel Range Organics (DRO)	<50.0	1000	1140	114	1050	105	70-130	8	20	mg/kg	07.20.2020 17:36	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	122		141	**	128		70-130	%	07.20.2020 17:36			
o-Terphenyl	131	**	127		123		70-130	%	07.20.2020 17:36			

Analytical Method: TPH By SW8015 Mod

Seq Number: 3132037

Matrix: Solid

MB Sample Id: 7707616-1-BLK

Prep Method: SW8015P

Date Prep: 07.17.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.17.2020 12:46	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3132042

Matrix: Solid

MB Sample Id: 7707621-1-BLK

Prep Method: SW8015P

Date Prep: 07.17.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.17.2020 22:31	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3132192

Matrix: Solid

MB Sample Id: 7707723-1-BLK

Prep Method: SW8015P

Date Prep: 07.20.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.20.2020 17:17	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3132037

Matrix: Soil

Parent Sample Id: 667520-001

MS Sample Id: 667520-001 S

Prep Method: SW8015P

Date Prep: 07.17.2020

MSD Sample Id: 667520-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	807	81	804	81	70-130	0	20	mg/kg	07.17.2020 14:13	
Diesel Range Organics (DRO)	<49.9	997	847	85	841	84	70-130	1	20	mg/kg	07.17.2020 14:13	
Surrogate			MS %Rec	MS Flag		MSD %Rec	MSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane			95			94			70-130	%	07.17.2020 14:13	
o-Terphenyl			95			94			70-130	%	07.17.2020 14:13	

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

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Tetra Tech- Midland

Solaris Booster Pump 1003

Analytical Method: TPH By SW8015 Mod

Seq Number: 3132042

Parent Sample Id: 667520-021

Matrix: Soil

MS Sample Id: 667520-021 S

Prep Method: SW8015P

Date Prep: 07.17.2020

MSD Sample Id: 667520-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	881	88	881	88	70-130	0	20	mg/kg	07.17.2020 23:56	
Diesel Range Organics (DRO)	65.8	997	837	77	834	77	70-130	0	20	mg/kg	07.17.2020 23:56	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		94		70-130	%	07.17.2020 23:56
o-Terphenyl	99		96		70-130	%	07.17.2020 23:56

Analytical Method: TPH By SW8015 Mod

Seq Number: 3132192

Parent Sample Id: 667586-001

Matrix: Soil

MS Sample Id: 667586-001 S

Prep Method: SW8015P

Date Prep: 07.20.2020

MSD Sample Id: 667586-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	89.5	996	777	69	857	77	70-130	10	20	mg/kg	07.20.2020 18:34	X
Diesel Range Organics (DRO)	4880	996	5680	80	5710	83	70-130	1	20	mg/kg	07.20.2020 18:34	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	126		123		70-130	%	07.20.2020 18:34
o-Terphenyl	128		99		70-130	%	07.20.2020 18:34

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132601

MB Sample Id: 7708071-1-BLK

Matrix: Solid

LCS Sample Id: 7708071-1-BKS

Prep Method: SW5035A

Date Prep: 07.24.2020

LCSD Sample Id: 7708071-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.114	114	0.112	112	70-130	2	35	mg/kg	07.25.2020 03:21	
Toluene	<0.00200	0.100	0.110	110	0.107	107	70-130	3	35	mg/kg	07.25.2020 03:21	
Ethylbenzene	<0.00200	0.100	0.104	104	0.102	102	70-130	2	35	mg/kg	07.25.2020 03:21	
m,p-Xylenes	<0.00400	0.200	0.207	104	0.201	101	70-130	3	35	mg/kg	07.25.2020 03:21	
o-Xylene	<0.00200	0.100	0.103	103	0.0996	100	70-130	3	35	mg/kg	07.25.2020 03:21	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		99		98		70-130	%	07.25.2020 03:21
4-Bromofluorobenzene	102		107		102		70-130	%	07.25.2020 03:21

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Tetra Tech- Midland

Solaris Booster Pump 1003

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132604

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.25.2020

MB Sample Id: 7708076-1-BLK

LCS Sample Id: 7708076-1-BKS

LCSD Sample Id: 7708076-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.101	101	0.113	113	70-130	11	35	mg/kg	07.25.2020 14:04	
Toluene	<0.00200	0.100	0.0998	100	0.108	108	70-130	8	35	mg/kg	07.25.2020 14:04	
Ethylbenzene	<0.00200	0.100	0.0972	97	0.105	105	70-130	8	35	mg/kg	07.25.2020 14:04	
m,p-Xylenes	<0.00400	0.200	0.189	95	0.204	102	70-130	8	35	mg/kg	07.25.2020 14:04	
o-Xylene	<0.00200	0.100	0.0938	94	0.102	102	70-130	8	35	mg/kg	07.25.2020 14:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		95		96		70-130	%	07.25.2020 14:04
4-Bromofluorobenzene	104		100		108		70-130	%	07.25.2020 14:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132650

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.26.2020

MB Sample Id: 7708102-1-BLK

LCS Sample Id: 7708102-1-BKS

LCSD Sample Id: 7708102-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.111	111	0.113	113	70-130	2	35	mg/kg	07.26.2020 12:21	
Toluene	<0.00200	0.100	0.101	101	0.101	101	70-130	0	35	mg/kg	07.26.2020 12:21	
Ethylbenzene	<0.00200	0.100	0.0966	97	0.0958	96	70-130	1	35	mg/kg	07.26.2020 12:21	
m,p-Xylenes	<0.00400	0.200	0.182	91	0.184	92	70-130	1	35	mg/kg	07.26.2020 12:21	
o-Xylene	<0.00200	0.100	0.0925	93	0.0916	92	70-130	1	35	mg/kg	07.26.2020 12:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		101		100		70-130	%	07.26.2020 12:21
4-Bromofluorobenzene	104		100		97		70-130	%	07.26.2020 12:21

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132601

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.24.2020

Parent Sample Id: 667520-012

MS Sample Id: 667520-012 S

MSD Sample Id: 667520-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0649	65	0.0610	61	70-130	6	35	mg/kg	07.25.2020 04:02	X
Toluene	<0.00199	0.0994	0.0433	44	0.0388	39	70-130	11	35	mg/kg	07.25.2020 04:02	X
Ethylbenzene	<0.00199	0.0994	0.0342	34	0.0300	30	70-130	13	35	mg/kg	07.25.2020 04:02	X
m,p-Xylenes	<0.00398	0.199	0.0689	35	0.0603	30	70-130	13	35	mg/kg	07.25.2020 04:02	X
o-Xylene	<0.00199	0.0994	0.0360	36	0.0315	32	70-130	13	35	mg/kg	07.25.2020 04:02	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		106		70-130	%	07.25.2020 04:02
4-Bromofluorobenzene	111		106		70-130	%	07.25.2020 04:02

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Tetra Tech- Midland
Solaris Booster Pump 1003

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132604

Parent Sample Id: 667520-028

Matrix: Soil

MS Sample Id: 667520-028 S

Prep Method: SW5035A

Date Prep: 07.25.2020

MSD Sample Id: 667520-028 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0955	96	0.0910	92	70-130	5	35	mg/kg	07.25.2020 14:46	
Toluene	<0.00198	0.0992	0.0885	89	0.0838	84	70-130	5	35	mg/kg	07.25.2020 14:46	
Ethylbenzene	<0.00198	0.0992	0.0824	83	0.0781	79	70-130	5	35	mg/kg	07.25.2020 14:46	
m,p-Xylenes	<0.00397	0.198	0.157	79	0.150	75	70-130	5	35	mg/kg	07.25.2020 14:46	
o-Xylene	<0.00198	0.0992	0.0775	78	0.0734	74	70-130	5	35	mg/kg	07.25.2020 14:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	07.25.2020 14:46
4-Bromofluorobenzene	104		100		70-130	%	07.25.2020 14:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3132650

Parent Sample Id: 667520-054

Matrix: Soil

MS Sample Id: 667520-054 S

Prep Method: SW5035A

Date Prep: 07.26.2020

MSD Sample Id: 667520-054 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0967	97	0.0927	93	70-130	4	35	mg/kg	07.26.2020 13:20	
Toluene	<0.00199	0.0996	0.0884	89	0.0844	85	70-130	5	35	mg/kg	07.26.2020 13:20	
Ethylbenzene	<0.00199	0.0996	0.0838	84	0.0796	80	70-130	5	35	mg/kg	07.26.2020 13:20	
m,p-Xylenes	<0.00398	0.199	0.159	80	0.152	76	70-130	5	35	mg/kg	07.26.2020 13:20	
o-Xylene	<0.00199	0.0996	0.0786	79	0.0746	75	70-130	5	35	mg/kg	07.26.2020 13:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		70-130	%	07.26.2020 13:20
4-Bromofluorobenzene	102		98		70-130	%	07.26.2020 13:20

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

Analysis Request of Chain of Custody Record

Page 1 of 6



Tetra Tech, Inc.

901 W Wall Street, Ste 100
Midland Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: Solaris

Site Manager: Brittany Long

Project Name: Booster Pump 1003

Project Location: Eddy Co, NM

Project #:

212C-MD-02236

Invoice to: Tetra Tech, Inc.

Receiving Laboratory: Xenco

Sampler Signature: Conner Moehring

Comments:

SAMPLE IDENTIFICATION

LAB # (LAB USE ONLY)		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	
		YEAR: 2020	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE
AH #1 (0-1)			7/15/2020		X		X		
AH #1 (1-1.5)			7/15/2020		X		X		
AH #2 (0-1)			7/15/2020		X		X		
AH #2 (1-1.5)			7/15/2020		X		X		
AH #3 (0-1)			7/15/2020		X		X		
AH #3 (1-1.5)			7/15/2020		X		X		
AH #4 (0-1)			7/15/2020		X		X		
AH #4 (1-1.5)			7/15/2020		X		X		
AH #4 (2-2.5)			7/15/2020		X		X		
AH #4 (3-3.5)			7/15/2020		X		X		

Relinquished by: *Conner Moehring* Date: 7/17/20 Time: 1128
 Received by: *Brittany Long* Date: 7/17/20 Time: 1128

Relinquished by: Date: Time:

Received by: Date: Time:

Date: Time:

Date: Time:

Date: Time:

ORIGINAL COPY

ANALYSIS REQUEST
(Circle or Specify Method No.)

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

LAB USE ONLY

REMARKS:

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

Sample Temperature

0.7/0.3

0.4/0.3

(Circle) GRAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record

Page 2 of 6



Tetra Tech, Inc.

 901 W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Brittany Long

Solaris

Site Manager:

Booster Pump 1003

Project Name:

Eddy Co, NM

Project Location:
(county, state)

Project #:

212C-MD-02236

Invoice to:

Tetra Tech, Inc.

Receiving Laboratory:

Xenco

Sampler Signature:

Conner Moehring

Comments:

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

SAMPLING

YEAR: 2020

DATE

TIME

MATRIX

PRESERVATIVE METHOD

 WATER
 SOIL
 HCL
 HNO₃
 ICE
 None
CONTAINERS
FILTERED (Y/N)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

ANALYSIS REQUEST

(Circle or Specify Method No.)

1007520

LAB USE ONLY

REMARKS:

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

Sample Temperature

0710.3

Relinquished by:

Date: Time:

Relinquished by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

Received by:

Date: Time:

Received by:

Date: Time:

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record

Page 3 of 6



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Client Name: Solaris

Site Manager: Brittany Long

Project Name: Booster Pump 1003

Project Location: Eddy Co, NM

Project #:

212C-MD-02236

Invoice to:

Tetra Tech, Inc.

Receiving Laboratory: Xenco

Sampler Signature:

Conner Moehring

Comments:

SAMPLE IDENTIFICATION

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)		
		DATE	TIME	WATER	SOIL	HCL	HNO ₃			ICE	None
AH #8 (1-1.5)		7/15/2020		X		X		1 N			
AH #8 (2-2.5)		7/15/2020		X		X		1 N			
AH #8 (3-3.5)		7/15/2020		X		X		1 N			
AH #9 (0-1)		7/15/2020		X		X		1 N			
AH #10 (0-1)		7/15/2020		X		X		1 N			
AH #11 (0-1)		7/15/2020		X		X		1 N			
AH #11 (1-1.5)		7/15/2020		X		X		1 N			
AH #12 (0-1)		7/15/2020		X		X		1 N			
AH #12 (1-1.5)		7/15/2020		X		X		1 N			
AH #13 (0-1)		7/15/2020		X		X		1 N			

ANALYSIS REQUEST

(Circle or Specify Method No.)

UW 7520

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

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

07/03

Analysis Request of Custody Record



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Page 4 of 6

Client Name: Solaris		Site Manager: Brittany Long	
Project Name: Booster Pump 1003			
Project Location: Eddy Co., NM		Project #: 212C-MD-02236	
Invoice to: Tetra Tech, Inc.		Sampler Signature: Conner Moehring	
Receiving Laboratory: Xenco		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None					
										YEAR: 2020				
AH #13 (1-1.5)		7/15/2020		X				X				1 N		BTEX 8021B BTEX 8260B
AH #14 (0-1)		7/15/2020		X				X				1 N		TPH TX1005 (Ext to C35)
AH #14 (1-1.5)		7/15/2020		X				X				1 N		TPH 8015M (GRO - DRO - ORO - MRO)
AH #14 (2-2.5)		7/15/2020		X				X				1 N		PAH 8270C
AH #14 (3-3.5)		7/15/2020		X				X				1 N		Total Metals Ag As Ba Cd Cr Pb Se Hg
AH #15 (0-1)		7/15/2020		X				X				1 N		TCLP Metals Ag As Ba Cd Cr Pb Se Hg
AH #15 (1-1.5)		7/15/2020		X				X				1 N		TCLP Volatiles
AH #15 (2-2.5)		7/15/2020		X				X				1 N		TCLP Semi Volatiles
AH #15 (3-3.5)		7/15/2020		X				X				1 N		RCI
AH #16 (0-1)		7/15/2020		X				X				1 N		GC/MS Vol. 8260B / 624
														GC/MS Semi. Vol. 8270C/625
														PCB's 8082 / 608
														NORM
														PLM (Asbestos)
														Chloride
														Chloride Sulfate TDS
														General Water Chemistry (see attached list)
														Anion/Cation Balance
														Hold

Aliquished by: <i>Kevin Myrdal</i> Date: 7/17/20 Time: 11:28 Received by: <i>BAW</i> Date: 7/17 Time:	Aliquished by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____
--	--

LAB USE ONLY Sample Temperature: 0.710.3 REMARKS: ☒ STANDARD ☐ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report	(Circle) AND DELIVERED FEDEX UPS Tracking #: _____
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Analysis Request of Chain of Custody Record

Page 5 of 6



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Client Name: Solaris

Site Manager: Brittany Long

Project Name: Booster Pump 1003

Project Location: Eddy Co, NM

Project #: 212C-MD-02236

Invoice to: Tetra Tech, Inc.

Receiving Laboratory: Xenco

Sampler Signature: Conner Moehring

Comments:

SAMPLE IDENTIFICATION

3/36:41 AM

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None	BTX			TX1005 (Ext to	8270C	Ag As B	Ag As	Volatiles	Semi Volatiles	RCI	GC/MS Vol. 8260B	GC/MS Semi. Vol. 8	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate	General Water Che	Anion/Cation Balan																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
AH #16 (1-1.5')		7/15/2020		X				X			1 N	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

ANALYSIS REQUEST

(Circle or Specify Method No.)

1007520

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

Hold

LAB USE ONLY

REMARKS:

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

Sample Temperature

0.710.3

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 07.17.2020 11.28.00 AM

Work Order #: 667520

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.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?	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

BTEX was in bulk container

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 07.17.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.20.2020

Certificate of Analysis Summary 671718



Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11
Report Date: 09.08.2020 14:09
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	671718-001	671718-002	671718-003	671718-004	671718-005	671718-006
	<i>Field Id:</i>	Trench -1 (0-1')	Trench -1 (0-2')	Trench -1 (2-3')	Trench -1 (3-4')	Trench -2 (0-1')	Trench -2 (1-2')
	<i>Depth:</i>	0-1 ft	0-2 ft	2-3 ft	3-4 ft	0-1 ft	1-2 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32
	<i>Analyzed:</i>	09.03.2020 14:50	09.03.2020 15:07	09.03.2020 15:13	09.03.2020 15:18	09.03.2020 15:24	09.03.2020 15:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1530 49.6	1780 50.0	111 9.92	484 49.7	804 9.98	5520 49.6
TPH By SW8015 Mod	<i>Extracted:</i>	09.03.2020 11:14	09.03.2020 11:14	09.03.2020 11:14	09.03.2020 11:14		
	<i>Analyzed:</i>	09.03.2020 13:05	09.03.2020 14:05	09.03.2020 14:25	09.03.2020 14:46		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9		
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9		
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9		
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9		

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

Certificate of Analysis Summary 671718

Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11
 Report Date: 09.08.2020 14:09
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	671718-007	671718-008	671718-009	671718-010	671718-011	671718-012
	Field Id:	Trench -2 (2-3')	Trench -2 (3-4')	Trench -2 (4-5')	Trench -2 (5-6')	Trench -2 (6-7')	Trench -2 (7-8')
	Depth:	2-3 ft	3-4 ft	4-5 ft	5-6 ft	6-7 ft	7-8 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00
Inorganic Anions by EPA 300/300.1	Extracted:	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32
	Analyzed:	09.03.2020 15:46	09.03.2020 15:52	09.03.2020 15:57	09.03.2020 16:03	09.03.2020 16:09	09.03.2020 16:25
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3810 49.6	796 10.1	1430 49.7	1730 49.5	598 9.94	73.6 10.1

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Certificate of Analysis Summary 671718

Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11

Report Date: 09.08.2020 14:09

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	671718-013	671718-014	671718-015	671718-016	671718-017	671718-018
	<i>Field Id:</i>	Trench -2 (8-9')	Trench -3 (0-1')	Trench -3 (1-2')	Trench -3 (2-3')	Trench -3 (3-4')	Trench -3 (4-5')
	<i>Depth:</i>	8-9 ft	0-1 ft	1-2 ft	2-3 ft	3-4 ft	4-5 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:32
	<i>Analyzed:</i>	09.03.2020 16:31	09.03.2020 16:48	09.03.2020 16:53	09.03.2020 16:59	09.03.2020 17:04	09.03.2020 17:10
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		150 10.1	3600 50.1	4400 50.4	560 10.1	392 9.94	155 9.94

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Certificate of Analysis Summary 671718

Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11

Report Date: 09.08.2020 14:09

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	671718-019	671718-020	671718-021	671718-022	671718-023	671718-024
	Field Id:	Trench -3 (5-6')	Trench -4 (0-1')	Trench -4 (1-2')	Trench -4 (2-3')	Trench -4 (3-4')	Trench -5 (0-1')
	Depth:	5-6 ft	0-1 ft	1-2 ft	2-3 ft	3-4 ft	0-1 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00
Inorganic Anions by EPA 300/300.1	Extracted:	09.03.2020 13:32	09.03.2020 13:32	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56
	Analyzed:	09.03.2020 17:16	09.03.2020 17:21	09.03.2020 17:55	09.03.2020 18:12	09.03.2020 18:17	09.03.2020 18:23
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		175 9.98	6710 49.5	3160 49.7	247 10.0	227 9.94	82.4 9.94
TPH By SW8015 Mod	Extracted:		09.03.2020 11:14	09.03.2020 11:14	09.03.2020 11:14	09.03.2020 11:14	
	Analyzed:		09.03.2020 20:30	09.03.2020 15:06	09.03.2020 15:26	09.03.2020 15:46	
	Units/RL:		mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)			<50.0 50.0	<49.8 49.8	<50.2 50.2	<49.8 49.8	
Diesel Range Organics (DRO)			1030 50.0	<49.8 49.8	<50.2 50.2	<49.8 49.8	
Motor Oil Range Hydrocarbons (MRO)			228 50.0	<49.8 49.8	<50.2 50.2	<49.8 49.8	
Total TPH			1260 50.0	<49.8 49.8	<50.2 50.2	<49.8 49.8	

BRL - Below Reporting Limit

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



Certificate of Analysis Summary 671718

Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11
 Report Date: 09.08.2020 14:09
 Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	671718-025	671718-026	671718-027	671718-028	671718-029	671718-030
	<i>Field Id:</i>	Trench -5 (1-2')	Trench -6 (0-1')	Trench -6 (1-2')	Trench -6 (2-3')	Trench -6 (3-4')	Trench -7 (0-1')
	<i>Depth:</i>	1-2 ft	0-1 ft	1-2 ft	2-3 ft	3-4 ft	0-1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56
	<i>Analyzed:</i>	09.03.2020 18:28	09.03.2020 18:45	09.03.2020 18:51	09.03.2020 18:56	09.03.2020 19:02	09.03.2020 19:07
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		15.6 10.0	5540 50.3	3700 50.2	143 9.92	222 9.98	4050 49.4

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Certificate of Analysis Summary 671718

Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11

Report Date: 09.08.2020 14:09

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	671718-031	671718-032	671718-033	671718-034	671718-035	671718-036
	<i>Field Id:</i>	Trench -7 (1-2')	Trench -7 (2-3')	Trench -7 (3-4')	Trench -7 (4-5')	Trench -7 (5-6')	Trench -7 (6-7')
	<i>Depth:</i>	1-2 ft	2-3 ft	3-4 ft	4-5 ft	5-6 ft	6-7 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56
	<i>Analyzed:</i>	09.03.2020 19:13	09.03.2020 19:30	09.03.2020 19:35	09.03.2020 19:52	09.03.2020 19:58	09.03.2020 20:03
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4680 49.7	4300 50.2	4410 50.2	3710 49.8	3640 49.9	2070 49.5

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Certificate of Analysis Summary 671718

Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11
 Report Date: 09.08.2020 14:09
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	671718-037	671718-038	671718-039	671718-040	671718-041	671718-042
	Field Id:	Trench -7 (7-8')	Trench -7 (8-9')	Trench -7 (9-10')	Trench -8 (0-1')	Trench -8 (1-2')	Trench -8 (2-3')
	Depth:	7-8 ft	8-9 ft	9-10 ft	0-1 ft	1-2 ft	2-3 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00
Inorganic Anions by EPA 300/300.1	Extracted:	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 13:56	09.03.2020 14:41	09.03.2020 14:41
	Analyzed:	09.03.2020 20:09	09.03.2020 20:14	09.03.2020 20:20	09.03.2020 20:25	09.03.2020 20:59	09.03.2020 21:16
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1670 49.5	289 10.0	328 9.98	3620 50.2	5120 50.3	4340 49.9

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Certificate of Analysis Summary 671718

Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11

Report Date: 09.08.2020 14:09

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	671718-043	671718-044	671718-045	671718-046	671718-047	671718-048
	Field Id:	Trench -8 (3-4')	Trench -8 (4-5')	Trench -8 (5-6')	Trench -8 (6-7')	Trench -8 (7-8')	Trench -8 (8-9')
	Depth:	3-4 ft	4-5 ft	5-6 ft	6-7 ft	7-8 ft	8-9 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00
Inorganic Anions by EPA 300/300.1	Extracted:	09.03.2020 14:41	09.03.2020 14:41	09.03.2020 14:41	09.03.2020 14:41	09.03.2020 14:41	09.03.2020 14:41
	Analyzed:	09.03.2020 21:21	09.03.2020 21:27	09.03.2020 21:32	09.03.2020 21:49	09.03.2020 21:55	09.03.2020 22:00
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4820 49.5	4790 50.4	4550 50.1	3230 50.4	3220 50.2	318 9.94

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Certificate of Analysis Summary 671718



Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11
Report Date: 09.08.2020 14:09
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	671718-049	671718-050	671718-051	671718-052	671718-053	671718-054
	<i>Field Id:</i>	Trench -8 (9-10')	Trench -9 (0-1')	Trench -9 (1-2')	Trench -10 (0-1')	Trench -10 (1-2')	Trench -11 (0-1')
	<i>Depth:</i>	9-10 ft	0-1 ft	1-2 ft	0-1 ft	1-2 ft	0-1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00	08.31.2020 00:00
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	09.03.2020 14:41	09.03.2020 14:41	09.03.2020 14:41	09.03.2020 14:41	09.03.2020 14:41	09.03.2020 14:41
	<i>Analyzed:</i>	09.03.2020 22:06	09.03.2020 22:11	09.03.2020 22:17	09.03.2020 22:34	09.03.2020 22:39	09.03.2020 22:56
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		167 9.98	787 9.96	225 9.98	42.2 10.1	540 10.1	58.7 9.92

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Certificate of Analysis Summary 671718

Tetra Tech- Midland, Midland, TX

Project Name: Booster Pump 1003

Project Id: 212C-MD-02236
 Contact: Mike Carmona
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 09.02.2020 17:11
 Report Date: 09.08.2020 14:09
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	671718-055					
	Field Id:	Trench -11 (1-2')					
	Depth:	1-2 ft					
	Matrix:	SOIL					
	Sampled:	08.31.2020 00:00					
Inorganic Anions by EPA 300/300.1	Extracted:	09.03.2020 14:41					
	Analyzed:	09.03.2020 23:02					
	Units/RL:	mg/kg RL					
Chloride		67.2 9.98					

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Analytical Report 671718

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Booster Pump 1003

212C-MD-02236

09.08.2020

Collected By: Client

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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), 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: TN102385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.08.2020

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **671718**

Booster Pump 1003

Project Address: Lea County, New Mexico

Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 671718. 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. 671718 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Trench -1 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-001
Trench -1 (0-2')	S	08.31.2020 00:00	0 - 2 ft	671718-002
Trench -1 (2-3')	S	08.31.2020 00:00	2 - 3 ft	671718-003
Trench -1 (3-4')	S	08.31.2020 00:00	3 - 4 ft	671718-004
Trench -2 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-005
Trench -2 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-006
Trench -2 (2-3')	S	08.31.2020 00:00	2 - 3 ft	671718-007
Trench -2 (3-4')	S	08.31.2020 00:00	3 - 4 ft	671718-008
Trench -2 (4-5')	S	08.31.2020 00:00	4 - 5 ft	671718-009
Trench -2 (5-6')	S	08.31.2020 00:00	5 - 6 ft	671718-010
Trench -2 (6-7')	S	08.31.2020 00:00	6 - 7 ft	671718-011
Trench -2 (7-8')	S	08.31.2020 00:00	7 - 8 ft	671718-012
Trench -2 (8-9')	S	08.31.2020 00:00	8 - 9 ft	671718-013
Trench -3 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-014
Trench -3 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-015
Trench -3 (2-3')	S	08.31.2020 00:00	2 - 3 ft	671718-016
Trench -3 (3-4')	S	08.31.2020 00:00	3 - 4 ft	671718-017
Trench -3 (4-5')	S	08.31.2020 00:00	4 - 5 ft	671718-018
Trench -3 (5-6')	S	08.31.2020 00:00	5 - 6 ft	671718-019
Trench -4 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-020
Trench -4 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-021
Trench -4 (2-3')	S	08.31.2020 00:00	2 - 3 ft	671718-022
Trench -4 (3-4')	S	08.31.2020 00:00	3 - 4 ft	671718-023
Trench -5 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-024
Trench -5 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-025
Trench -6 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-026
Trench -6 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-027
Trench -6 (2-3')	S	08.31.2020 00:00	2 - 3 ft	671718-028
Trench -6 (3-4')	S	08.31.2020 00:00	3 - 4 ft	671718-029
Trench -7 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-030
Trench -7 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-031
Trench -7 (2-3')	S	08.31.2020 00:00	2 - 3 ft	671718-032
Trench -7 (3-4')	S	08.31.2020 00:00	3 - 4 ft	671718-033
Trench -7 (4-5')	S	08.31.2020 00:00	4 - 5 ft	671718-034
Trench -7 (5-6')	S	08.31.2020 00:00	5 - 6 ft	671718-035
Trench -7 (6-7')	S	08.31.2020 00:00	6 - 7 ft	671718-036
Trench -7 (7-8')	S	08.31.2020 00:00	7 - 8 ft	671718-037
Trench -7 (8-9')	S	08.31.2020 00:00	8 - 9 ft	671718-038
Trench -7 (9-10')	S	08.31.2020 00:00	9 - 10 ft	671718-039
Trench -8 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-040
Trench -8 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-041
Trench -8 (2-3')	S	08.31.2020 00:00	2 - 3 ft	671718-042
Trench -8 (3-4')	S	08.31.2020 00:00	3 - 4 ft	671718-043

**Sample Cross Reference 671718****Tetra Tech- Midland, Midland, TX****Booster Pump 1003**

Trench -8 (4-5')	S	08.31.2020 00:00	4 - 5 ft	671718-044
Trench -8 (5-6')	S	08.31.2020 00:00	5 - 6 ft	671718-045
Trench -8 (6-7')	S	08.31.2020 00:00	6 - 7 ft	671718-046
Trench -8 (7-8')	S	08.31.2020 00:00	7 - 8 ft	671718-047
Trench -8 (8-9')	S	08.31.2020 00:00	8 - 9 ft	671718-048
Trench -8 (9-10')	S	08.31.2020 00:00	9 - 10 ft	671718-049
Trench -9 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-050
Trench -9 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-051
Trench -10 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-052
Trench -10 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-053
Trench -11 (0-1')	S	08.31.2020 00:00	0 - 1 ft	671718-054
Trench -11 (1-2')	S	08.31.2020 00:00	1 - 2 ft	671718-055



CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Booster Pump 1003

Project ID: 212C-MD-02236
Work Order Number(s): 671718

Report Date: 09.08.2020
Date Received: 09.02.2020

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -1 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
 Lab Sample Id: 671718-001 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
 Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1530	49.6	mg/kg	09.03.2020 14:50		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.03.2020 11:14 Basis: Wet Weight
 Seq Number: 3136390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 13:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 13:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 13:05	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 13:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	09.03.2020 13:05	
o-Terphenyl	84-15-1	100	%	70-135	09.03.2020 13:05	



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -1 (0-2')** Matrix: Soil Date Received: 09.02.2020 17:11
 Lab Sample Id: 671718-002 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
 Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1780	50.0	mg/kg	09.03.2020 15:07		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.03.2020 11:14 Basis: Wet Weight
 Seq Number: 3136390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 14:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 14:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 14:05	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 14:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	09.03.2020 14:05	
o-Terphenyl	84-15-1	107	%	70-135	09.03.2020 14:05	



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -1 (2-3')** Matrix: Soil Date Received: 09.02.2020 17:11
 Lab Sample Id: 671718-003 Date Collected: 08.31.2020 00:00 Sample Depth: 2 - 3 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
 Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	111	9.92	mg/kg	09.03.2020 15:13		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.03.2020 11:14 Basis: Wet Weight
 Seq Number: 3136390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 14:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 14:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 14:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 14:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	09.03.2020 14:25	
o-Terphenyl	84-15-1	109	%	70-135	09.03.2020 14:25	



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -1 (3-4')** Matrix: Soil Date Received: 09.02.2020 17:11
 Lab Sample Id: 671718-004 Date Collected: 08.31.2020 00:00 Sample Depth: 3 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
 Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	484	49.7	mg/kg	09.03.2020 15:18		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.03.2020 11:14 Basis: Wet Weight
 Seq Number: 3136390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.03.2020 14:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.03.2020 14:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.03.2020 14:46	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.03.2020 14:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	09.03.2020 14:46	
o-Terphenyl	84-15-1	107	%	70-135	09.03.2020 14:46	



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -2 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-005 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	804	9.98	mg/kg	09.03.2020 15:24		1



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -2 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-006 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5520	49.6	mg/kg	09.03.2020 15:41		5



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -2 (2-3')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-007 Date Collected: 08.31.2020 00:00 Sample Depth: 2 - 3 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3810	49.6	mg/kg	09.03.2020 15:46		5

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -2 (3-4')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-008 Date Collected: 08.31.2020 00:00 Sample Depth: 3 - 4 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	796	10.1	mg/kg	09.03.2020 15:52		1



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -2 (4-5')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-009 Date Collected: 08.31.2020 00:00 Sample Depth: 4 - 5 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1430	49.7	mg/kg	09.03.2020 15:57		5



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -2 (5-6')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-010 Date Collected: 08.31.2020 00:00 Sample Depth: 5 - 6 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1730	49.5	mg/kg	09.03.2020 16:03		5

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX****Booster Pump 1003**

Sample Id: **Trench -2 (6-7')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-011 Date Collected: 08.31.2020 00:00 Sample Depth: 6 - 7 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	598	9.94	mg/kg	09.03.2020 16:09		1



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -2 (7-8')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-012 Date Collected: 08.31.2020 00:00 Sample Depth: 7 - 8 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	73.6	10.1	mg/kg	09.03.2020 16:25		1

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Booster Pump 1003

Sample Id: **Trench -2 (8-9')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-013 Date Collected: 08.31.2020 00:00 Sample Depth: 8 - 9 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	150	10.1	mg/kg	09.03.2020 16:31		1



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -3 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-014 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3600	50.1	mg/kg	09.03.2020 16:48		5

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Sample Id: **Trench -3 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-015 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4400	50.4	mg/kg	09.03.2020 16:53		5



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -3 (2-3')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-016 Date Collected: 08.31.2020 00:00 Sample Depth: 2 - 3 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	560	10.1	mg/kg	09.03.2020 16:59		1

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -3 (3-4')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-017 Date Collected: 08.31.2020 00:00 Sample Depth: 3 - 4 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	392	9.94	mg/kg	09.03.2020 17:04		1



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -3 (4-5')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-018 Date Collected: 08.31.2020 00:00 Sample Depth: 4 - 5 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	155	9.94	mg/kg	09.03.2020 17:10		1



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -3 (5-6')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-019 Date Collected: 08.31.2020 00:00 Sample Depth: 5 - 6 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	175	9.98	mg/kg	09.03.2020 17:16		1



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -4 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
 Lab Sample Id: 671718-020 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.03.2020 13:32 Basis: Wet Weight
 Seq Number: 3136405

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6710	49.5	mg/kg	09.03.2020 17:21		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.03.2020 11:14 Basis: Wet Weight
 Seq Number: 3136390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 20:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	1030	50.0	mg/kg	09.03.2020 20:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	228	50.0	mg/kg	09.03.2020 20:30		1
Total TPH	PHC635	1260	50.0	mg/kg	09.03.2020 20:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	09.03.2020 20:30	
o-Terphenyl	84-15-1	117	%	70-135	09.03.2020 20:30	



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -4 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
 Lab Sample Id: 671718-021 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
 Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3160	49.7	mg/kg	09.03.2020 17:55		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.03.2020 11:14 Basis: Wet Weight
 Seq Number: 3136390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.03.2020 15:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.03.2020 15:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.03.2020 15:06	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.03.2020 15:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	09.03.2020 15:06	
o-Terphenyl	84-15-1	107	%	70-135	09.03.2020 15:06	



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Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -4 (2-3')** Matrix: Soil Date Received: 09.02.2020 17:11
 Lab Sample Id: 671718-022 Date Collected: 08.31.2020 00:00 Sample Depth: 2 - 3 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
 Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	247	10.0	mg/kg	09.03.2020 18:12		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.03.2020 11:14 Basis: Wet Weight
 Seq Number: 3136390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	09.03.2020 15:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	09.03.2020 15:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	09.03.2020 15:26	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	09.03.2020 15:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	09.03.2020 15:26	
o-Terphenyl	84-15-1	112	%	70-135	09.03.2020 15:26	



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -4 (3-4')** Matrix: Soil Date Received: 09.02.2020 17:11
 Lab Sample Id: 671718-023 Date Collected: 08.31.2020 00:00 Sample Depth: 3 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
 Tech: MAB % Moisture:
 Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
 Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	227	9.94	mg/kg	09.03.2020 18:17		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DTH % Moisture:
 Analyst: DTH Date Prep: 09.03.2020 11:14 Basis: Wet Weight
 Seq Number: 3136390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.03.2020 15:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.03.2020 15:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.03.2020 15:46	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.03.2020 15:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	09.03.2020 15:46	
o-Terphenyl	84-15-1	109	%	70-135	09.03.2020 15:46	



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -5 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-024 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	82.4	9.94	mg/kg	09.03.2020 18:23		1



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -5 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-025 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.6	10.0	mg/kg	09.03.2020 18:28		1



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -6 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-026 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5540	50.3	mg/kg	09.03.2020 18:45		5

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -6 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-027 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3700	50.2	mg/kg	09.03.2020 18:51		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -6 (2-3')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-028 Date Collected: 08.31.2020 00:00 Sample Depth: 2 - 3 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	143	9.92	mg/kg	09.03.2020 18:56		1

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -6 (3-4')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-029 Date Collected: 08.31.2020 00:00 Sample Depth: 3 - 4 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	222	9.98	mg/kg	09.03.2020 19:02		1

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX****Booster Pump 1003**

Sample Id: **Trench -7 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-030 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4050	49.4	mg/kg	09.03.2020 19:07		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -7 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-031 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4680	49.7	mg/kg	09.03.2020 19:13		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -7 (2-3')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-032 Date Collected: 08.31.2020 00:00 Sample Depth: 2 - 3 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4300	50.2	mg/kg	09.03.2020 19:30		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -7 (3-4')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-033 Date Collected: 08.31.2020 00:00 Sample Depth: 3 - 4 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4410	50.2	mg/kg	09.03.2020 19:35		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -7 (4-5')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-034 Date Collected: 08.31.2020 00:00 Sample Depth: 4 - 5 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3710	49.8	mg/kg	09.03.2020 19:52		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -7 (5-6')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-035 Date Collected: 08.31.2020 00:00 Sample Depth: 5 - 6 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3640	49.9	mg/kg	09.03.2020 19:58		5

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -7 (6-7')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-036 Date Collected: 08.31.2020 00:00 Sample Depth: 6 - 7 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2070	49.5	mg/kg	09.03.2020 20:03		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -7 (7-8')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-037 Date Collected: 08.31.2020 00:00 Sample Depth: 7 - 8 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1670	49.5	mg/kg	09.03.2020 20:09		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -7 (8-9')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-038 Date Collected: 08.31.2020 00:00 Sample Depth: 8 - 9 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	289	10.0	mg/kg	09.03.2020 20:14		1



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -7 (9-10')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-039 Date Collected: 08.31.2020 00:00 Sample Depth: 9 - 10 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	328	9.98	mg/kg	09.03.2020 20:20		1

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX****Booster Pump 1003**

Sample Id: **Trench -8 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-040 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 13:56 Basis: Wet Weight
Seq Number: 3136410

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3620	50.2	mg/kg	09.03.2020 20:25		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -8 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-041 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5120	50.3	mg/kg	09.03.2020 20:59		5

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX****Booster Pump 1003**

Sample Id: **Trench -8 (2-3')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-042 Date Collected: 08.31.2020 00:00 Sample Depth: 2 - 3 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4340	49.9	mg/kg	09.03.2020 21:16		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -8 (3-4')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-043 Date Collected: 08.31.2020 00:00 Sample Depth: 3 - 4 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4820	49.5	mg/kg	09.03.2020 21:21		5

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -8 (4-5')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-044 Date Collected: 08.31.2020 00:00 Sample Depth: 4 - 5 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4790	50.4	mg/kg	09.03.2020 21:27		5

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -8 (5-6')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-045 Date Collected: 08.31.2020 00:00 Sample Depth: 5 - 6 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4550	50.1	mg/kg	09.03.2020 21:32		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -8 (6-7')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-046 Date Collected: 08.31.2020 00:00 Sample Depth: 6 - 7 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3230	50.4	mg/kg	09.03.2020 21:49		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -8 (7-8')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-047 Date Collected: 08.31.2020 00:00 Sample Depth: 7 - 8 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3220	50.2	mg/kg	09.03.2020 21:55		5



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -8 (8-9')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-048 Date Collected: 08.31.2020 00:00 Sample Depth: 8 - 9 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	318	9.94	mg/kg	09.03.2020 22:00		1



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -8 (9-10')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-049 Date Collected: 08.31.2020 00:00 Sample Depth: 9 - 10 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	167	9.98	mg/kg	09.03.2020 22:06		1



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -9 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-050 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	787	9.96	mg/kg	09.03.2020 22:11		1

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -9 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-051 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	225	9.98	mg/kg	09.03.2020 22:17		1



Certificate of Analytical Results 671718

Tetra Tech- Midland, Midland, TX

Booster Pump 1003

Sample Id: **Trench -10 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-052 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	42.2	10.1	mg/kg	09.03.2020 22:34		1

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -10 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-053 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	540	10.1	mg/kg	09.03.2020 22:39		1

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -11 (0-1')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-054 Date Collected: 08.31.2020 00:00 Sample Depth: 0 - 1 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.7	9.92	mg/kg	09.03.2020 22:56		1

**Certificate of Analytical Results 671718****Tetra Tech- Midland, Midland, TX**

Booster Pump 1003

Sample Id: **Trench -11 (1-2')** Matrix: Soil Date Received: 09.02.2020 17:11
Lab Sample Id: 671718-055 Date Collected: 08.31.2020 00:00 Sample Depth: 1 - 2 ft
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Tech: MAB % Moisture:
Analyst: MAB Date Prep: 09.03.2020 14:41 Basis: Wet Weight
Seq Number: 3136411

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	67.2	9.98	mg/kg	09.03.2020 23:02		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 Detection Limit **LOD** Limit of Detection

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Tetra Tech- Midland Booster Pump 1003

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3136405

Matrix: Solid

Prep Method: E300P

Date Prep: 09.03.2020

MB Sample Id: 7710765-1-BLK

LCS Sample Id: 7710765-1-BKS

LCSD Sample Id: 7710765-1-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	265	106	268	107	90-110	1	20	mg/kg	09.03.2020 14:39	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3136410

Matrix: Solid

Prep Method: E300P

Date Prep: 09.03.2020

MB Sample Id: 7710766-1-BLK

LCS Sample Id: 7710766-1-BKS

LCSD Sample Id: 7710766-1-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	266	106	269	108	90-110	1	20	mg/kg	09.03.2020 17:44	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3136411

Matrix: Solid

Prep Method: E300P

Date Prep: 09.03.2020

MB Sample Id: 7710781-1-BLK

LCS Sample Id: 7710781-1-BKS

LCSD Sample Id: 7710781-1-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	266	106	269	108	90-110	1	20	mg/kg	09.03.2020 20:48	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3136405

Matrix: Soil

Prep Method: E300P

Date Prep: 09.03.2020

Parent Sample Id: 671718-001

MS Sample Id: 671718-001 S

MSD Sample Id: 671718-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1530	200	1730	100	1740	105	90-110	1	20	mg/kg	09.03.2020 14:56	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3136405

Matrix: Soil

Prep Method: E300P

Date Prep: 09.03.2020

Parent Sample Id: 671718-011

MS Sample Id: 671718-011 S

MSD Sample Id: 671718-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	598	200	801	102	801	102	90-110	0	20	mg/kg	09.03.2020 16:14	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3136410

Matrix: Soil

Prep Method: E300P

Date Prep: 09.03.2020

Parent Sample Id: 671718-021

MS Sample Id: 671718-021 S

MSD Sample Id: 671718-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3160	202	3380	109	3370	104	90-110	0	20	mg/kg	09.03.2020 18:00	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Tetra Tech- Midland Booster Pump 1003

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3136410

Matrix: Soil

Prep Method: E300P

Date Prep: 09.03.2020

Parent Sample Id: 671718-031

MS Sample Id: 671718-031 S

MSD Sample Id: 671718-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	4680	201	4880	100	4870	95	90-110	0	20	mg/kg	09.03.2020 19:18	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3136411

Matrix: Soil

Prep Method: E300P

Date Prep: 09.03.2020

Parent Sample Id: 671718-041

MS Sample Id: 671718-041 S

MSD Sample Id: 671718-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5120	198	5320	101	5320	100	90-110	0	20	mg/kg	09.03.2020 21:05	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3136411

Matrix: Soil

Prep Method: E300P

Date Prep: 09.03.2020

Parent Sample Id: 671718-051

MS Sample Id: 671718-051 S

MSD Sample Id: 671718-051 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	225	200	429	102	429	102	90-110	0	20	mg/kg	09.03.2020 22:23	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3136390

Matrix: Solid

Prep Method: SW8015P

Date Prep: 09.03.2020

MB Sample Id: 7710737-1-BLK

LCS Sample Id: 7710737-1-BKS

LCSD Sample Id: 7710737-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	875	88	851	85	70-135	3	35	mg/kg	09.03.2020 12:24	
Diesel Range Organics (DRO)	<50.0	1000	992	99	954	95	70-135	4	35	mg/kg	09.03.2020 12:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		118		112		70-135	%	09.03.2020 12:24
o-Terphenyl	100		117		111		70-135	%	09.03.2020 12:24

Analytical Method: TPH By SW8015 Mod

Seq Number: 3136390

Matrix: Solid

Prep Method: SW8015P

Date Prep: 09.03.2020

MB Sample Id: 7710737-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.03.2020 11:44	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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



Tetra Tech- Midland

Booster Pump 1003

Analytical Method: TPH By SW8015 Mod

Seq Number: 3136390

Parent Sample Id: 671718-001

Matrix: Soil

MS Sample Id: 671718-001 S

Prep Method: SW8015P

Date Prep: 09.03.2020

MSD Sample Id: 671718-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	892	89	863	86	70-135	3	35	mg/kg	09.03.2020 13:25	
Diesel Range Organics (DRO)	<50.0	1000	1000	100	972	97	70-135	3	35	mg/kg	09.03.2020 13:25	
Surrogate			MS %Rec	MS Flag		MSD %Rec	MSD Flag	Limits		Units	Analysis Date	
1-Chlorooctane			125			120		70-135		%	09.03.2020 13:25	
o-Terphenyl			124			119		70-135		%	09.03.2020 13:25	

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

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

Analysis Request of Custody Record



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

671718

Page 1 of 1

Client Name:

Solaris

Site Manager:

Mike Carmona

Project Name:

Booster Pump 1003

Project Location:

Lea County, New Mexico

Project #:

212C-MD-02236

Invoice to:

Tetra Tech, Inc.

Receiving Laboratory:

Sampler Signature:

John Thurston

Comments:

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

SAMPLING

YEAR: 2020

DATE TIME

MATRIX

PRESERVATIVE METHOD

WATER SOIL HCL HNO₃ ICE None

CONTAINERS FILTERED (Y/N)

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

ANALYSIS REQUEST

(Circle or Specify Method No.)

 Trench -1 (0-1')
 Trench -1 (1-2')
 Trench -1 (2-3')
 Trench -1 (3-4')
 Trench -2 (0-1')
 Trench -2 (1-2')
 Trench -2 (2-3')
 Trench -2 (3-4')
 Trench -2 (4-5')
 Trench -2 (5-6')

Date: Time:

Received by:

Date: Time:

CONTAINERS

FILTERED (Y/N)

BTX 8021B

BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

 elinquished by:
 Date: Time:

9/2/20 17:11

Received by: Cbe Cullen

Date: Time: 9-2-20 17:11

 elinquished by:
 Date: Time:

Date: Time:

Received by:

Date: Time:

Sample Temperature

4.8/4.6

TMM-007 (-0.0)

LAB USE ONLY

REMARKS:

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

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

671718

Page 2 of 6

Client Name:

Solaris

Site Manager:

Mike Carmona

Project Name:

Booster Pump 1003

Project Location:
(county, state)

Lea County, New Mexico

Project #:

212C-MD-02236

Invoice to:

Tetra Tech, Inc.

Receiving Laboratory:

Sampler Signature:

John Thurston

Comments:

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

SAMPLING

YEAR: 2020

DATE

TIME

MATRIX

PRESERVATIVE METHOD

WATER

SOIL

HCL

HNO₃

ICE

None

CONTAINERS

FILTERED (Y/N)

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

ANALYSIS REQUEST

(Circle or Specify Method No.)

 Trench -2 (6-7')
 Trench -2 (7-8')
 Trench -2 (8-9')
 Trench -3 (0-1')
 Trench -3 (1-2')
 Trench -3 (2-3')
 Trench -3 (3-4')
 Trench -3 (4-5')
 Trench -3 (5-6')
 Trench -4 (0-1')

Date: Time:

Date: Time:

Date: Time:

Received by:

Received by:

Received by:

Date: Time:

Date: Time:

Date: Time:

LAB USE ONLY

LAB USE ONLY

Sample Temperature

4.8/4.6

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

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Tetra Tech, Inc.

901W Wail Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

671718

Page 3 of 6

Client Name: Solaris		Site Manager: Mike Carmona	
Project Name: Booster Pump 1003			
Project Location: Lea County, New Mexico		Project #: 212C-MD-02236	
Invoice to: Tetra Tech, Inc.			
Receiving Laboratory:		Sampler Signature: John Thurston	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME		WATER	SOIL	HCL	HNO ₃	ICE			None
	Trench -4 (1-2')	8/31/2020		X			X			1	N	
	Trench -4 (2-3')	8/31/2020		X			X			1	N	
	Trench -4 (3-4')	8/31/2020		X			X			1	N	
	Trench -5 (0-1')	8/31/2020		X			X			1	N	
	Trench -5 (1-2')	8/31/2020		X			X			1	N	
	Trench -6 (0-1')	8/31/2020		X			X			1	N	
	Trench -6 (1-2')	8/31/2020		X			X			1	N	
	Trench -6 (2-3')	8/31/2020		X			X			1	N	
	Trench -6 (3-4')	8/31/2020		X			X			1	N	
	Trench -7 (0-1')	8/31/2020		X			X			1	N	

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

LAB USE ONLY	ANALYSIS REQUEST (Circle or Specify Method No.)
4.8/4.6	BTEX 8021B BTEX 8260B
	TPH TX1005 (Ext to C35)
	TPH 8015M (GRO - DRO - ORO - MRO)
	PAH 8270C
	Total Metals Ag As Ba Cd Cr Pb Se Hg
	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	TCLP Volatiles
	TCLP Semi Volatiles
	RCI
	GC/MS Vol. 8260B / 624
	GC/MS Semi. Vol. 8270C/625
	PCB's 8082 / 608
	NORM
	PLM (Asbestos)
	Chloride
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
Hold	

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

671718

Page 4 of 6

Client Name: Solaris		Site Manager: Mike Carmona	
Project Name: Booster Pump 1003			
Project Location: Lea County, New Mexico		Project #: 212C-MD-02236	
Invoice to: Tetra Tech, Inc.			
Receiving Laboratory:		Sampler Signature: John Thurston	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD					# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None					
										YEAR: 2020				
	Trench -7 (1-2)	8/31/2020		X				X				1	N	BTEX 8021B BTEX 8260B
	Trench -7 (2-3)	8/31/2020			X			X				1	N	TPH TX1005 (Ext to C35)
	Trench -7 (3-4)	8/31/2020			X			X				1	N	TPH 8015M (GRO - DRO - ORO - MRO)
	Trench -7 (4-5)	8/31/2020			X			X				1	N	PAH 8270C
	Trench -7 (5-6)	8/31/2020			X			X				1	N	Total Metals Ag As Ba Cd Cr Pb Se Hg
	Trench -7 (6-7)	8/31/2020			X			X				1	N	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	Trench -7 (7-8)	8/31/2020			X			X				1	N	TCLP Volatiles
	Trench -7 (8-9)	8/31/2020			X			X				1	N	TCLP Semi Volatiles
	Trench -7 (9-10)	8/31/2020			X			X				1	N	RCI
	Trench -8 (0-1)	8/31/2020			X			X				1	N	GC/MS Vol. 8260B / 624
														GC/MS Semi. Vol. 8270C/625
														PCB's 8082 / 608
														NORM
														PLM (Asbestos)
														Chloride
														Chloride Sulfate TDS
														General Water Chemistry (see attached list)
														Anion/Cation Balance
														Hold

Inquired by:	Date:	Time:	Received by:	Date:	Time:
	9/2/20	17:11	Mike Carmona	9-2-20	17:11
Inquired by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY	REMARKS:
☒ STANDARD ☐ RUSH: Same Day 24 hr 48 hr 72 hr ☐ Rush Charges Authorized ☐ Special Report Limits or TRRP Report	Sample Temperature: 48/46 (Circle) HAND DELIVERED FEDEX UPS Tracking #:

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Analysis Request of Custody Record



Tetra Tech, Inc.

 501W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Client Name:

Site Manager:

Mike Carmona

Project Name:

Booster Pump 1003

Project Location:

Lea County, New Mexico

Project #:

212C-MD-02236

Invoice to:

Tetra Tech, Inc.

Receiving Laboratory:

Sampler Signature:

John Thurston

Comments:

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

SAMPLING

YEAR: 2020

DATE
TIME

MATRIX

PRESERVATIVE METHOD

WATER
SOIL
HCL
HNO₃
ICE
None

CONTAINERS

FILTERED (Y/N)

Trench -8 (1-2)	8/31/2020		X							1	N
Trench -8 (2-3)	8/31/2020		X							1	N
Trench -8 (3-4)	8/31/2020		X							1	N
Trench -8 (4-5)	8/31/2020		X							1	N
Trench -8 (5-6)	8/31/2020		X							1	N
Trench -8 (6-7)	8/31/2020		X							1	N
Trench -8 (7-8)	8/31/2020		X							1	N
Trench -8 (8-9)	8/31/2020		X							1	N
Trench -8 (9-10)	8/31/2020		X							1	N
Trench -9 (0-1)	8/31/2020		X							1	N

Inquired by:

Date: 9/2/20

Time: 17:11

Received by:

Date: 9-2-20

Time: 17:11

Inquired by:

Date: 9/2/20

Time: 17:11

Received by:

Date: 9-2-20

Time: 17:11

Inquired by:

Date:

Time:

Received by:

Date:

Time:

LAB USE ONLY

REMARKS:

☒ STANDARD

Sample Temperature

☐ RUSH: Same Day 24 hr 48 hr 72 hr☐ Rush Charges Authorized☐ Special Report Limits or TRRP Report

4.8/4.4

ANALYSIS REQUEST
(Circle or Specify Method No.)

621718

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

Hold

Page 5 of 6

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Analysis Request of Custody Record

Page 6 of 6



Tetra Tech, Inc.

 501 W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

671718

Client Name:

Solaris

Site Manager:

Mike Carmona

Project Name:

Booster Pump 1003

Project Location:

Lea County, New Mexico

Project #:

212C-MD-02236

Invoice to:

Tetra Tech, Inc.

Receiving Laboratory:

Sampler Signature:

John Thurston

Comments:

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLING

MATRIX

PRESERVATIVE METHOD

CONTAINERS

FILTERED (Y/N)

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

ANALYSIS REQUEST

(Circle or Specify Method No.)

Inquired by:

Date: Time:

Inquired by:

Date: Time:

Inquired by:

Date: Time:

Received by:

Date: Time:

Received by:

Date: Time:

Received by:

Date: Time:

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRAP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

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Appendix D

Map Unit Description: Tonuco loamy sand, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

Eddy Area, New Mexico

TC—Tonuco loamy sand, 0 to 3 percent slopes, eroded

Map Unit Setting

National map unit symbol: 1w60

Elevation: 3,000 to 4,100 feet

Mean annual precipitation: 10 to 14 inches

Mean annual air temperature: 60 to 64 degrees F

Frost-free period: 200 to 217 days

Farmland classification: Not prime farmland

Map Unit Composition

Tonuco and similar soils: 98 percent

Minor components: 2 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tonuco

Setting

Landform: Plains, alluvial fans

Landform position (three-dimensional): Rise

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 5 inches: loamy sand

H2 - 5 to 15 inches: loamy fine sand

H3 - 15 to 19 inches: indurated

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 6 to 20 inches to petrocalcic

Natural drainage class: Excessively drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 1.0

Available water storage in profile: Very low (about 1.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Ecological site: Sandy (R042XC004NM)

Hydric soil rating: No

Map Unit Description: Tonuco loamy sand, 0 to 3 percent slopes, eroded---Eddy Area, New Mexico

Minor Components

Tonuco

Percent of map unit: 1 percent

Ecological site: Sandy (R042XC004NM)

Hydric soil rating: No

Dune land

Percent of map unit: 1 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 15, Sep 15, 2019



(26)

BLM SERIAL #:

COMPANY REFERENCE:

3.1 Seed Mixture 1, for Loamy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains lovegrass (<i>Eragrostis intermedia</i>)	0.5
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.0
Sideoats grama (<i>Bouteloua curtipendula</i>)	5.0
Plains bristlegrass (<i>Setaria macrostachya</i>)	2.0

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the 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: RR Paul Date: _____
email: _____ Telephone: _____

OCD Only

Received by: Robert Hamlet Date: 3/19/2021

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Robert Hamlet Date: 3/19/2021

District I

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

District II

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

District III

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

District IV

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

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

CONDITIONS

Action 10704

CONDITIONS OF APPROVAL

Operator:	SOLARIS WATER MIDSTREAM, LLC	907 Tradewinds Blvd, Suite B	Midland, TX79706	OGRID:	371643	Action Number:	10704	Action Type:	C-141
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OCD Reviewer	Condition
rhamlet	The Remediation Plan is approved with the following conditions: All floor samples need to be below closure criteria standards of <50" depth to groundwater from Table 1 of the spill rule. Please make sure the edges/sidewalls are delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH.