Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006937434
District RP	
Facility ID	
Application ID	

Closure

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

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

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

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

Printed Name: Todd Wells Title: Environmental Specialist

Signature: Todd Wells Date: 5/3/21

email: Todd_Wells@eogresources.com Telephone: (432) 686-3613

OCD Only

Received by: Chad Hensley Date: 07/30/2021

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

Closure Approved by: Chad Hensley Date: 07/30/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

SITE INFORMATION

Report Type: Closure Report - NRM2006937434

General Site Information:						
Site:	**Klondike Reuse Water Pit**					
Company:	**EOG Resources**					
Section, Township and Range	**Unit H**	**Sec. 32**	**T 24S**	**R 34E**		
County:	**Lea County**					
GPS:	**32.177393**			**-103.4871000**		
Surface Owner:						

Release Data:	
Date Released:	10/2/2019
Type Release:	Failed Header
Source of Contamination:	Reuse Water
Fluid Released:	100 bbls RW
Fluids Recovered:	0 bbls PW

Official Communication:			
Name:	Todd Wells		Clair Gonzales
Company:	EOG Reources		Tetra Tech
Address:	5509 Champions Dr		901 West Wall Street
			Suite 100
City:	Midland Texas, 79706		Midland, Texas
Phone number:	432-686-3667		(432) 682-4559
Fax:			
Email:	Todd_Wells@eogresources.com		Clair.Gonzales@tetratech.com

Site Characterization	
Depth to Groundwater:	*224' below surface*
Karst Potential:	*low*

Recommended Remedial Action Levels (RRALs)			
Benzene	***Total BTEX***	***TPH (GRO+DRO+MRO)***	***Chlorides***
10 mg/kg	*50 mg/kg*	*100 mg/kg*	*600 mg/kg*

TETRA TECH

April 26, 2021

Environmental Specialist
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Closure Report for the EOG Resources, Klondike Reuse Water Pit, Unit H, Section 32, Township 24 South, Range 34 East, Lea County, New Mexico.

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess and remediate a release that occurred at the EOG Resources, Klondike Reuse Water Pit, Unit H, Section 32, Township 24 South, Range 34 East, Lea County, New Mexico (Site). The site coordinates are 32.177393º, -103.487100º. 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 October 2, 2019, and released approximately 100 barrels of reuse water; while pumping from one pit to another, the header pressured up and failed. None of the released fluids were recovered. The release occurred from the pit onto the pad; the impact stayed on the location, impacted areas measuring approximately 140’ x 690’. The C-141 form is included in Appendix A.

Site Characterization

A site characterization was performed for the site. No lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. The site is in a low karst potential area. There is a USGS Blue Line watercourse located 800’ away. The nearest well is listed in the USGS National Water Information Database website in Section 35, approximately 2.6 miles east of the site, and has a reported depth to groundwater of 224’ below ground surface. Site characterization data is included in Appendix B.

Regulatory

A risk-based evaluation was performed for the site following the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases,

Tetra Tech
901 West Wall Street, Suite 100, Midland, TX 79701
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

TETRA TECH

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). The proposed RRAL for TPH is 100 mg/kg (GRO+DRO+MRO) based upon the site characterization. Additionally, based on the site characterization, the proposed RRAL for chlorides is 600 mg/kg.

Soil Assessment and Analytical Results

On October 18, 2019, Tetra Tech personnel were onsite to evaluate and sample the release area. A total of eleven (11) auger holes (AH-1 through AH-11) were installed to total depths ranging from 0-1' – 2.5' below surface. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, none of the samples analyzed showed benzene, total BTEX, or TPH concentrations above the remediation threshold. However, chloride concentrations above the 600 mg/kg threshold were detected in the areas of auger holes (AH-4 and AH-11), at depths ranging from surface to 1.0' below surface. The area of auger hole (AH-4) was not vertically defined during the site assessment.

Remediation Activities

Based on the soil assessment results, Tetra Tech personnel were onsite on March 11, 2020, to supervise the remediation activities and collect confirmation samples. The impacted areas were excavated to total depths ranging from 1.0'-1.5' below surface, as shown on Figure 4 and highlighted (green) on Table 2.

Confirmation bottom hole and sidewall samples were collected every 200 square feet, a total of two (2) bottom hole samples (Bottom Hole 1 and Bottom Hole 2) and eight (8) sidewall samples (N1SW, N2SW, W1SW, W2SW, E1SW, E2SW, S1SW, S2SW) were collected to ensure proper removal of the impacted soils. The samples were submitted to the laboratory to be analyzed for TPH method 8015 extended, BTEX method 8021B, and Chloride by EPA Method 300.0. The sampling results are summarized in Table 2. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The excavation depths and sample locations are shown in Figure 4.

Referring to Table 2, all final confirmation samples collected showed benzene, total BTEX, and TPH concentrations below the remediation thresholds. Additionally, all samples showed chloride concentrations below the 600 mg/kg threshold.

Approximately 12 cubic yards of material was excavated and transported offsite for proper disposal. The areas were then backfilled with clean material to surface grade.

TETRA TECH

Conclusion

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

Respectfully submitted,
TETRA TECH

Brittany Long,
Project Manager

Clair Gonzales, P.G.
Senior Project Manager

Figures

SITE LOCATION

N
W
E
S

0 10,416.5 20,833

Approximate Scale in Feet

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

STATE LOCATOR MAP

OVERVIEW MAP
KLONDIKE REUSE PIT
Property Located at coordinates 32.177393°,-103.487100°
LEA COUNTY, NEW MEXICO

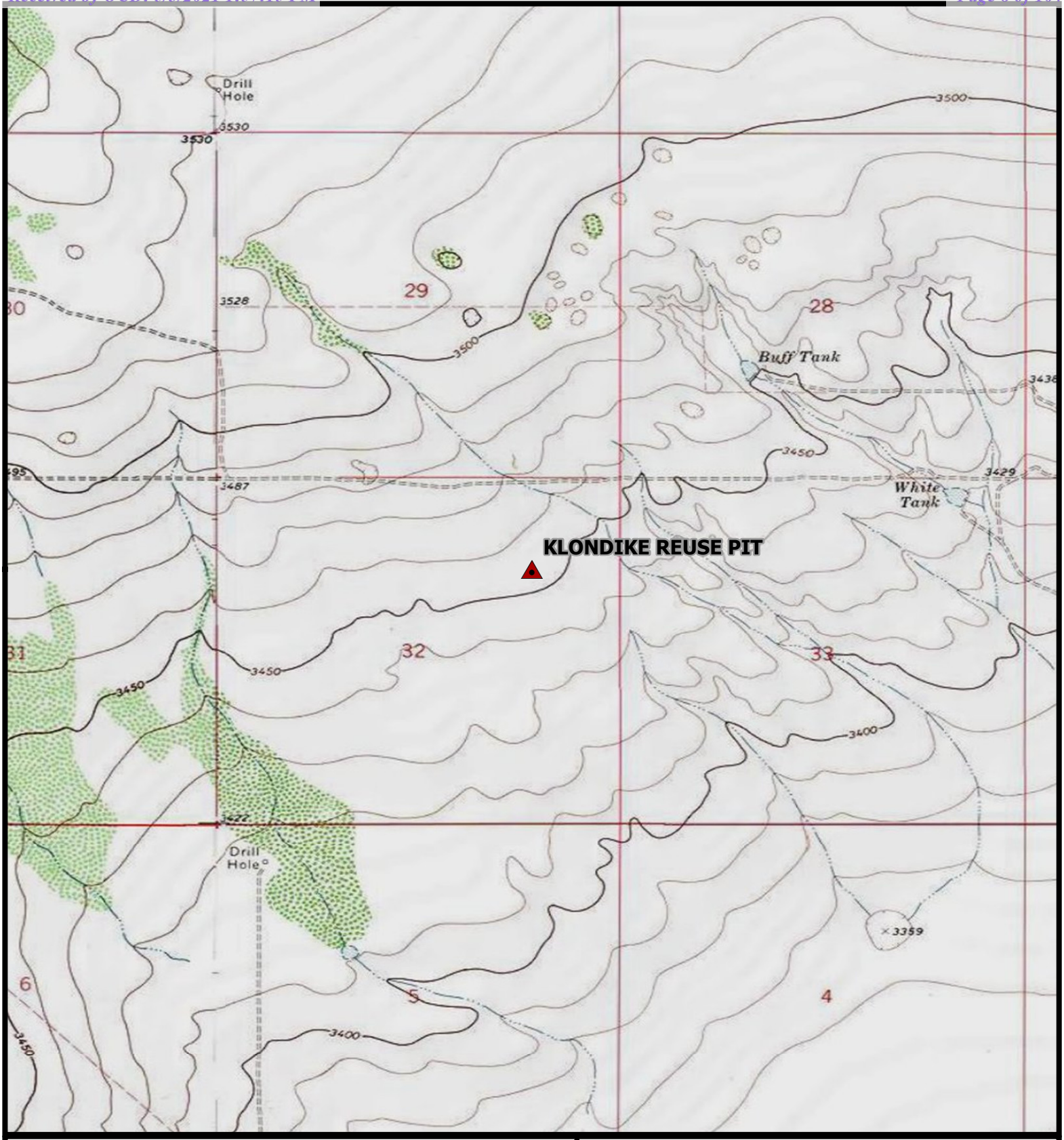
eog resources

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

Project #: 212C-MD-001978
Date: 04-17-2020
Drawn By: MLM

FIGURE
1

Document Path: H:\GIS\EOG RESOURCES\212C-MD-01978 KLONDIKE REUSE PIT\MXD\212C-MD-01978 KLONDIKE REUSE PIT FIG. 1.mxd



SITE LOCATION

N
W E
S

0 1,000 2,000

Approximate Scale in Feet

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

TOPOGRAPHIC MAP
KLONDIKE REUSE PIT
Property Located at coordinates 32.177393°,-103.487100°
LEA COUNTY, NEW MEXICO

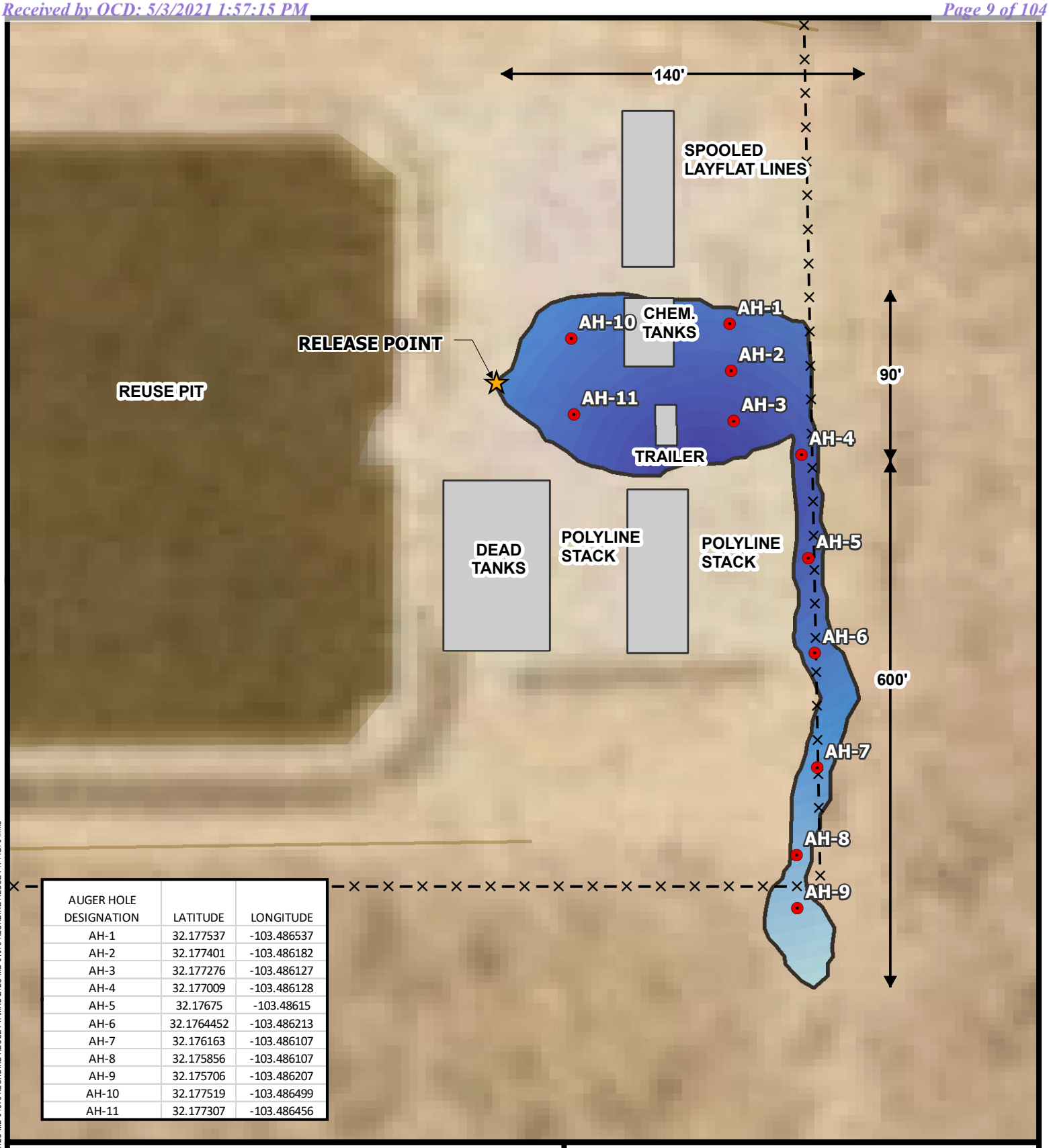
eog resources

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

Project #: 212C-MD-001978
Date: 04-17-2020
Drawn By: MLM

FIGURE 2

Document Path: H:\GIS\EOG RESOURCES\212C-MD-01978 KLONDIKE REUSE PIT\MXD\212C-MD-01978 KLONDIKE REUSE PIT FIG. 2.mxd



AUGER HOLE DESIGNATION	LATITUDE	LONGITUDE
AH-1	32.177537	-103.486537
AH-2	32.177401	-103.486182
AH-3	32.177276	-103.486127
AH-4	32.177009	-103.486128
AH-5	32.17675	-103.48615
AH-6	32.1764452	-103.486213
AH-7	32.176163	-103.486107
AH-8	32.175856	-103.486107
AH-9	32.175706	-103.486207
AH-10	32.177519	-103.486499
AH-11	32.177307	-103.486456

AUGERHOLE SAMPLE LOCATIONS
RELEASE POINT
FENCELINE
EQUIPMENT
AFFECTED SPILL AREA

N
W E
S

0 60 120
Approximate Scale in Feet

Planet Team (2018). Planet Application Program Interface: In Space for Life on Earth. San Francisco, CA. https://api.planet.com.

SPILL ASSESSEMT MAP
KLONDIKE REUSE PIT
Property Located at coordinates 32.177393°,-103.487100°
LEA COUNTY, NEW MEXICO

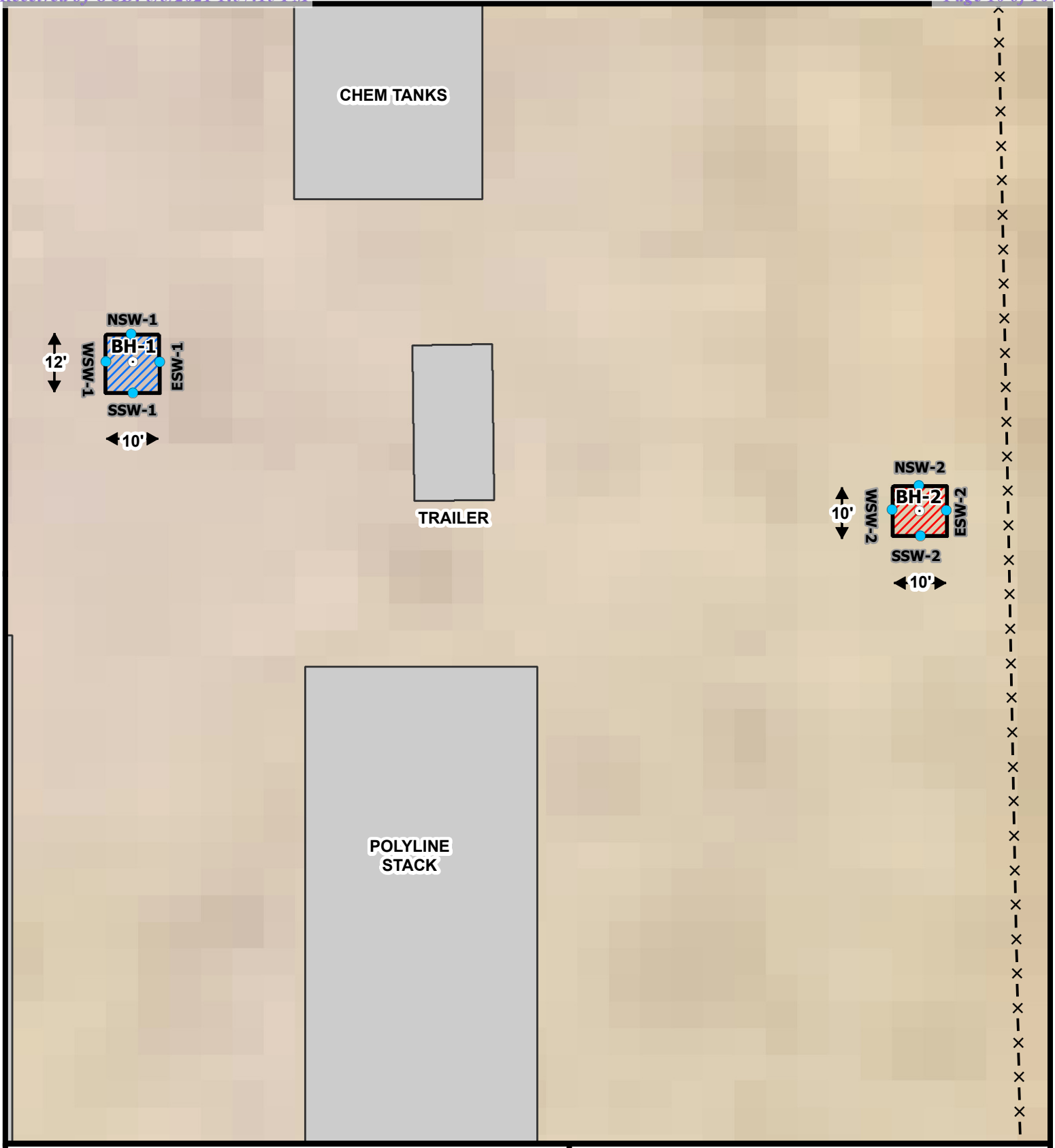
eog resources

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

Project #: 212C-MD-001978
Date: 04-17-2020
Drawn By: MLM

FIGURE 3

Date: 4/17/2020 Document Path: H:\GIS\EOG RESOURCES\212C-MD-01978 KLONDIKE REUSE PIT\MXD\212C-MD-01978 KLONDIKE REUSE PIT FIG. 3 .mxd



SIDEWALL SAMPLE LOCATIONS

BOTTOMHOLE SAMPLE LOCATIONS

FENCELINE

1.0' EXCAVATED DEPTH AREA

1.5' EXCAVATED DEPTH AREA

EQUIPMENT

N

W E

S

0 20 40

Approximate Scale in Feet

Planet Team (2018). Planet Application Program Interface: In Space for Life on Earth. San Francisco, CA. https://api.planet.com.

Date: 4/17/2020 Document Path: H:\GIS\EOG RESOURCES\212C-MD-01978 KLONDIKE REUSE PIT\MXD\212C-MD-01978 KLONDIKE REUSE PIT FIG. 4.mxd

EXCAVATION AREA & DEPTH MAP
KLONDIKE REUSE PIT
Property Located at coordinates 32.177393°,-103.487100°
LEA COUNTY, NEW MEXICO

eog resources

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

Project #: 212C-MD-001978
Date: 04-17-2020
Drawn By: MLM

FIGURE 4

Tables

Table 1
EOG
Klondike Reuse Pit
Lea County, New Mexico

Sample ID	Sample Date	BEB (ft)	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	ORO	Total						
AH-1	10/18/19	-	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	195
AH-2	10/18/19	-	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	110
	"	-	1-1.5	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	103
	"	-	2-2.5	X		<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	92.6
AH-3	10/18/19	-	0-10"	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	271
AH-4	10/18/19	-	0-6"		X	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	**865**
AH-5	10/18/19	-	0-6"	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	107
AH-6	10/18/19	-	0-6"	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	39.6
AH-7	10/18/19	-	0-6"	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6.26
AH-8	10/18/19	-	0-6"	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	460
AH-9	10/18/19	-	0-1	X		<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	243
AH-10	10/18/19	-	0-1	X		<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	304
AH-11	10/18/19	-	0-1		X	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	**614**
	"	-	1-1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	312

(-) Not Analyzed

Removed

Table 2
EOG
Klondike Reuse Pit
Lea County, New Mexico

Sample ID	Sample Date	Excavation Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
Bottom Hole-1	3/11/2020	1'	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	256
Bottom Hole-2	3/11/2020	1.5'	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	416
N1SW	3/11/2020	-	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	400
N2SW	3/11/2020	-	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	416
W1SW	3/11/2020	-	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	288
W2SW	3/11/2020	-	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
S1SW	3/11/2020	-		X	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**672**
	3/13/2020	-	X		<50.0	40.1	51.3	91.4	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<9.98
S2SW	3/11/2020	-	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
E1SW	3/11/2020	-	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	448
E2SW	3/11/2020	-	X		<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	176

(-) Not Analyzed

Removed

Photos

EOG Resources
Klondike Reuse Pit
Lea County, New Mexico

TETRA TECH

View North, areas of Auger Holes (1-3)

View North, areas of Auger Holes (4-8)

EOG Resources
Klondike Reuse Pit
Lea County, New Mexico

TETRA TECH

View South, area of Auger Holes (8-9)

View South, area of Auger Hole (10-11)

EOG Resources
Klondike Reuse Pit
Lea County, New Mexico

View North, area of Bottom Hole (1)

View Southwest, area of Bottom Hole (1)

EOG Resources
Klondike Reuse Pit
Lea County, New Mexico

View South, area of Bottom Hole (2)

TETRA TECH

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	NRM2006937434
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources	OGRID 7377
Contact Name Todd Wells	Contact Telephone (432) 686-3613
Contact email Todd_Wells@eogresources.com	Incident # *(assigned by OCD)*
Contact mailing address 5509 Champions Drive Midland, TX 79706	

Location of Release Source

Latitude 32.177393° Longitude -103.487100°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Klondike Reuse Water Pit	Site Type Reuse Water Pit
Date Release Discovered 10/2/19	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
H	32	24S	34E	Lea

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Reuse Water	Volume Released (bbls) 100	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: While pumping from one pit to another, the header pressured up and failed. Approximately 100 bbls of reuse water released from the header at the pit pad and none was recovered.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2006937434
District RP	
Facility ID	
Application ID	

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

Initial Response

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

☒ The source of the release has been stopped.

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

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

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

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

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

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

Printed Name: Todd Wells Title: Environmental Specialist

Signature: Todd Wells Date: 3-5-20

email: Todd_Wells@eogresources.com Telephone: (432) 686-3613

OCD Only

Received by: Ramona Marcus Date: 3/9/2020

State of New Mexico
Oil Conservation Division

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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

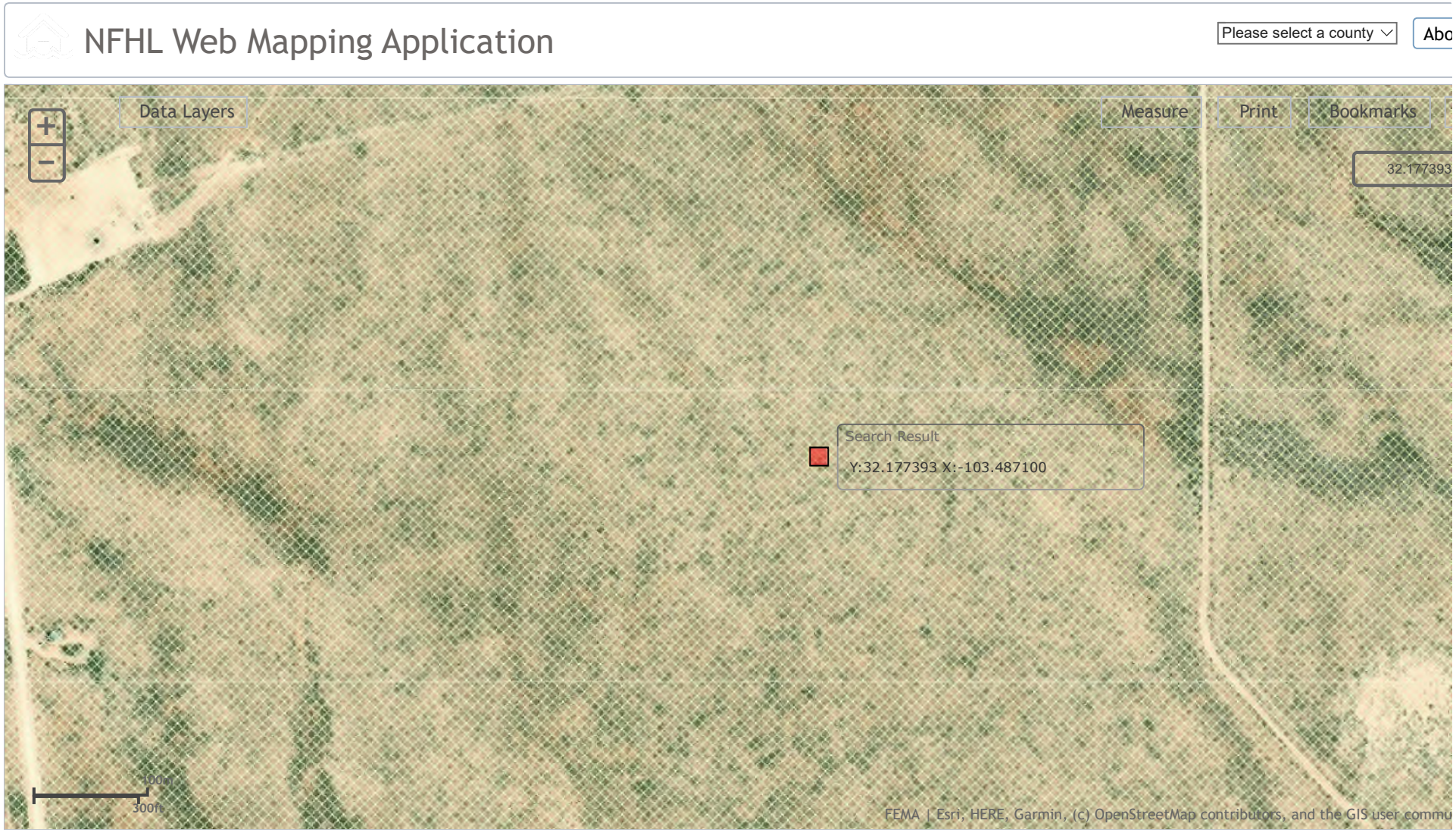
Printed Name: _____ Title: _____

Appendix B

USGS science for a changing world

National Water Information System: Mapper

Site Information


NFHL Web Mapping Application
Please select a county
Abo
Data Layers
Measure
Print
Bookmarks
32.177393
Search Result
Y:32.177393 X:-103.487100
100m
300ft
FEMA | Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user commu


EOG - Klondike Reuse Pit
Karst Potential Map
Legend
High
Klondike Reuse Pit Release Point
Low
Medium
12821
Klondike Reuse Pit Release Point
Google Earth
©2018 Google
N
2 mi

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 321025103263601

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

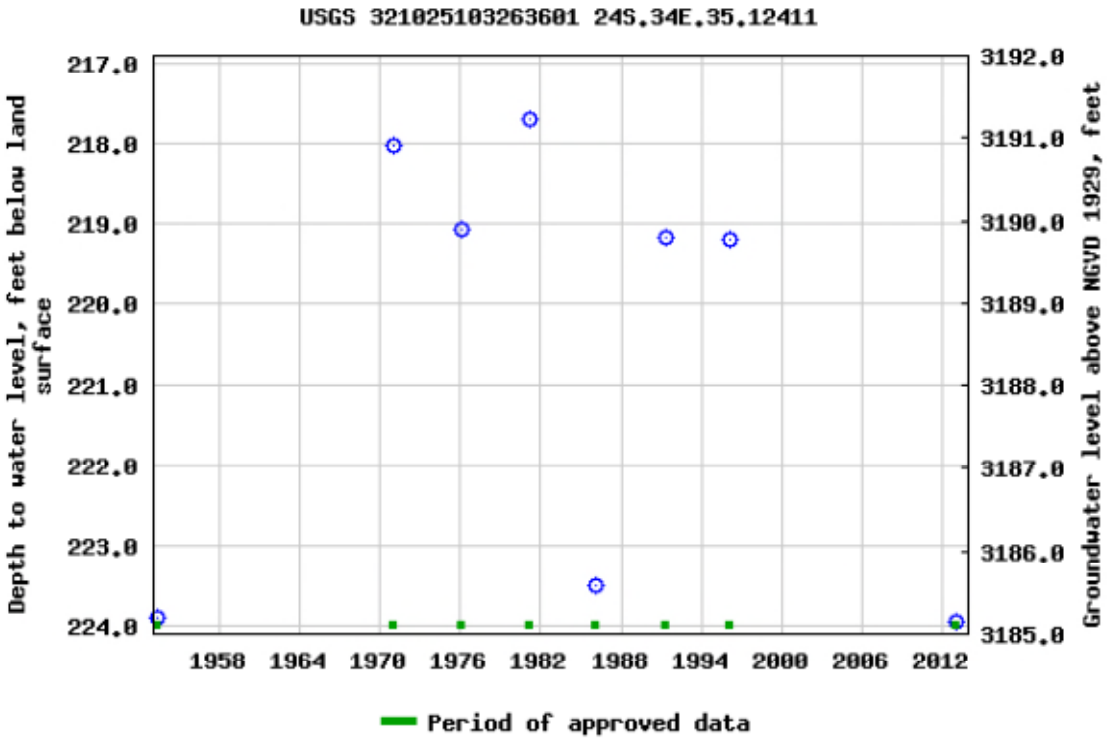
USGS 321025103263601 24S.34E.35.12411

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°10'44.0", Longitude 103°26'31.2" NAD83
Land-surface elevation 3,409.00 feet above NGVD29
The depth of the well is 257 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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



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

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

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2019-10-23 10:50:46 EDT
0.81 0.53 nadww01

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 Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02373	CUB	LE		4	1	32	24S	34E	641979	3560916*	600		
C 02386	CUB	LE	4	1	2	04	24S	34E	643962	3569290*	575	475	100
C 02387	CUB	LE			1	11	24S	34E	646513	3567613*	62	40	22
C 02397	CUB	LE	4	1	2	04	24S	34E	643962	3569290*	575	475	100
C 03932 POD13	CUB	LE	4	2	3	15	24S	34E	645314	3565203	90		
C 03932 POD3	CUB	LE	4	3	2	05	24S	34E	642442	3568787	100		
C 03932 POD8	CUB	LE	4	2	4	07	24S	34E	641120	3566769	72		
C 03943 POD1	CUB	LE	2	4	2	21	24S	34E	644523	3564266	610	431	179
C 04014 POD1	CUB	LE	1	1	3	06	24S	34E	639811	3568638	91	81	10

Average Depth to Water: **300 feet**
Minimum Depth: **40 feet**
Maximum Depth: **475 feet**

Record Count: 9

PLSS Search:

Township: 24S **Range:** 34E

***UTM location was derived from PLSS - see Help**

Water Well Data
Average Depth to Groundwater (ft)
EOG - Klondike Reuse Pit

23 South 33 East

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

23 South 34 East

6 329	5	4	3	2	1 137
7	8 255	9	10	11	12
18	17	16 345	15	14	13
19	20	21	22 282 295	23 233 265	24
30	29	28	27	26	25
31	32 160 130	33	34	35	36

23 South 35 East

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

24 South 33 East

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

24 South 34 East

6 81	5	4	3	2	1
7	8	9	10	11 40	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35 224	36

24 South 35 East

6	5	4	3	2	1
7	8	9	10 300	11	12
18	17	16	15	14	13
19	20 97	21	22	23	24
30 139	29	28	27	26	25
31	32	33	34	35	36

25 South 33 East

6	5 118	4	3 172	2	1
7	8	9	10	11 140	12 200
18	17	16	15	14	13 185
19	20 200	21 120	22	23	24
30	29	28	27 125	26 110	25
31 190	32	33	34	35	36

25 South 34 East

6	5	4	3	2	1 260
7	8	9	10	11	12
18	17	16	15 135	14	13
19	20	21	22	23	24 300
30	29 129 50	28	27	26	25
31	32	33	34	35	36

25 South 35 East

6	5 165	4	3 108	2	1
7	8	9	10	11	12
18 230	17	16	15	14	13
19	20	21 218	22	23	24
30 80	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
121 Abandoned Waterwell (recently measured)

Appendix C

Analytical Report 640378

for

Tetra Tech- Midland

Project Manager: Clair Gonzales

EOG Klondike Reuse Pit

23-OCT-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142), North Carolina (681)

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

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

Certificate of Analysis Summary 640378

Tetra Tech- Midland, Midland, TX

Project Name: EOG Klondike Reuse Pit

Project Id:

Contact: Clair Gonzales

Project Location: Lea Co NM

Date Received in Lab: Fri Oct-18-19 08:22 am

Report Date: 23-OCT-19

Project Manager: Jessica Kramer

Analysis Requested		640378-001		640378-002		640378-003		640378-004		640378-005		640378-006	
	Field Id:	AH-1 (0-1')		AH-2 (0-1')		AH-2 (1'-1.5')		AH-2 (2'-2.5')		AH3 (0-10")		AH-4 (0-6")	
	Depth:	0-1 ft		0-1 ft		1-1.5 ft		2-2.5 ft		0-10 In		0-6 In	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-16-19 10:00		Oct-16-19 10:05		Oct-16-19 10:10		Oct-16-19 10:15		Oct-16-19 10:20		Oct-16-19 10:25	
BTEX by EPA 8021B	***Extracted:***	Oct-21-19 16:00		Oct-21-19 16:00		Oct-21-19 16:00		Oct-21-19 16:00		Oct-21-19 16:00		Oct-21-19 16:00	
	Analyzed:	Oct-21-19 22:22		Oct-21-19 18:23		Oct-21-19 18:43		Oct-21-19 19:03		Oct-21-19 19:24		Oct-21-19 19:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00403	0.00403	<0.00402	0.00402	<0.00399	0.00399	<0.00398	0.00398	<0.00401	0.00401	<0.00402	0.00402
o-Xylene		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Total Xylenes		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00202	0.00202	<0.00201	0.00201	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	Oct-18-19 12:30		Oct-18-19 12:30		Oct-18-19 12:30		Oct-18-19 12:30		Oct-18-19 12:30		Oct-18-19 12:30	
	Analyzed:	Oct-18-19 19:08		Oct-18-19 19:13		Oct-18-19 19:18		Oct-18-19 19:23		Oct-18-19 19:28		Oct-18-19 19:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		195	4.96	110	5.04	103	4.99	92.6	4.95	271	4.95	865	5.02
TPH By SW8015 Mod	***Extracted:***	Oct-18-19 16:00		Oct-18-19 16:00		Oct-18-19 16:00		Oct-18-19 16:00		Oct-18-19 16:00		Oct-18-19 16:00	
	Analyzed:	Oct-18-19 21:55		Oct-18-19 22:50		Oct-18-19 23:08		Oct-18-19 23:26		Oct-18-19 23:45		Oct-19-19 00:03	
	Units/RL:	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	<49.9	49.9	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0
Total TPH		<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	<50.0	50.0

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 640378

Tetra Tech- Midland, Midland, TX

Project Name: EOG Klondike Reuse Pit

Project Id:
Contact: Clair Gonzales
Project Location: Lea Co NM

Date Received in Lab: Fri Oct-18-19 08:22 am
Report Date: 23-OCT-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	640378-007		640378-008		640378-009		640378-010		640378-011		640378-012	
	Field Id:	AH-5 (0-6")		AH-6 (0-6")		AH-7 (0-6")		AH-8 (0-6")		AH-9 (0-1')		AH-10 (0-1')	
	Depth:	0-6 In		0-6 In		0-6 In		0-6 In		0-1 ft		0-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-16-19 10:30		Oct-16-19 10:35		Oct-16-19 10:40		Oct-16-19 10:45		Oct-16-19 10:50		Oct-16-19 13:05	
BTEX by EPA 8021B	***Extracted:***	Oct-21-19 16:00		Oct-21-19 16:00		Oct-21-19 16:15		Oct-21-19 16:15		Oct-21-19 16:00		Oct-21-19 16:15	
	Analyzed:	Oct-21-19 20:04		Oct-21-19 20:24		Oct-22-19 05:03		Oct-22-19 05:23		Oct-21-19 22:43		Oct-22-19 05:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
m,p-Xylenes		<0.00399	0.00399	<0.00400	0.00400	<0.00399	0.00399	<0.00400	0.00400	<0.00403	0.00403	<0.00401	0.00401
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Oct-21-19 14:15		Oct-21-19 14:15		Oct-21-19 14:15		Oct-21-19 14:15		Oct-21-19 14:15		Oct-21-19 14:15	
	Analyzed:	Oct-21-19 14:49		Oct-21-19 15:03		Oct-21-19 15:08		Oct-21-19 15:13		Oct-21-19 15:18		Oct-21-19 15:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		107	5.00	39.6	5.05	6.26	5.05	460	4.96	243	4.99	304	4.98
TPH By SW8015 Mod	***Extracted:***	Oct-18-19 16:00		Oct-18-19 16:00		Oct-18-19 16:00		Oct-18-19 16:00		Oct-18-19 16:00		Oct-18-19 16:00	
	Analyzed:	Oct-19-19 00:21		Oct-19-19 00:39		Oct-19-19 00:57		Oct-19-19 06:58		Oct-19-19 07:16		Oct-19-19 07:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9
Total TPH		<49.9	49.9	<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9

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

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 640378

Tetra Tech- Midland, Midland, TX

Project Name: EOG Klondike Reuse Pit

Project Id:
Contact: Clair Gonzales
Project Location: Lea Co NM

Date Received in Lab: Fri Oct-18-19 08:22 am
Report Date: 23-OCT-19
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	640378-013		640378-014					
	Field Id:	AH-11 (0-1')		AH-11 (1'-1.5')					
	Depth:	0-1 ft		1-1.5 ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Oct-16-19 13:10		Oct-16-19 13:15					
BTEX by EPA 8021B	***Extracted:***	Oct-21-19 16:15		Oct-21-19 16:15					
	Analyzed:	Oct-22-19 04:43		Oct-22-19 04:22					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00201	0.00201				
Toluene		<0.00199	0.00199	<0.00201	0.00201				
Ethylbenzene		<0.00199	0.00199	<0.00201	0.00201				
m,p-Xylenes		<0.00398	0.00398	<0.00402	0.00402				
o-Xylene		<0.00199	0.00199	<0.00201	0.00201				
Total Xylenes		<0.00199	0.00199	<0.00201	0.00201				
Total BTEX		<0.00199	0.00199	<0.00201	0.00201				
Chloride by EPA 300	***Extracted:***	Oct-21-19 14:15		Oct-21-19 14:15					
	Analyzed:	Oct-21-19 15:38		Oct-21-19 16:06					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		614	5.03	312	5.02				
TPH By SW8015 Mod	***Extracted:***	Oct-18-19 16:00		Oct-18-19 16:00					
	Analyzed:	Oct-19-19 07:53		Oct-19-19 08:12					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.0	50.0				
Diesel Range Organics (DRO)		<49.8	49.8	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.0	50.0				
Total TPH		<49.8	49.8	<50.0	50.0				

Version: 1.%

Jessica Kramer
Project Assistant

23-OCT-19

Project Manager: **Clair Gonzales**
Tetra Tech- Midland
901 West Wall ST
Midland, TX 79701

Reference: XENCO Report No(s): **640378**
EOG Klondike Reuse Pit
Project Address: Lea Co NM

Clair Gonzales:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 640378. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 640378 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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

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

Sample Cross Reference 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 (0-1')	S	10-16-19 10:00	0 - 1 ft	640378-001
AH-2 (0-1')	S	10-16-19 10:05	0 - 1 ft	640378-002
AH-2 (1'-1.5')	S	10-16-19 10:10	1 - 1.5 ft	640378-003
AH-2 (2'-2.5')	S	10-16-19 10:15	2 - 2.5 ft	640378-004
AH3 (0-10")	S	10-16-19 10:20	0 - 10 In	640378-005
AH-4 (0-6")	S	10-16-19 10:25	0 - 6 In	640378-006
AH-5 (0-6")	S	10-16-19 10:30	0 - 6 In	640378-007
AH-6 (0-6")	S	10-16-19 10:35	0 - 6 In	640378-008
AH-7 (0-6")	S	10-16-19 10:40	0 - 6 In	640378-009
AH-8 (0-6")	S	10-16-19 10:45	0 - 6 In	640378-010
AH-9 (0-1')	S	10-16-19 10:50	0 - 1 ft	640378-011
AH-10 (0-1')	S	10-16-19 13:05	0 - 1 ft	640378-012
AH-11 (0-1')	S	10-16-19 13:10	0 - 1 ft	640378-013
AH-11 (1'-1.5')	S	10-16-19 13:15	1 - 1.5 ft	640378-014

Version: 1.%

CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: EOG Klondike Reuse Pit

Project ID:
Work Order Number(s): *640378*

Report Date: *23-OCT-19*
Date Received: *10/18/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3104981 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3104984 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-1 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-001	Date Collected:	10.16.19 10.00	Sample Depth:	0 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.18.19 12.30	Basis:	Wet Weight
Seq Number:	3104804				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**195**	4.96	mg/kg	10.18.19 19.08		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.18.19 21.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.18.19 21.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.18.19 21.55	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.18.19 21.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	10.18.19 21.55	
o-Terphenyl	84-15-1	119	%	70-135	10.18.19 21.55	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-1 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-001	Date Collected:	10.16.19 10.00	Sample Depth:	0 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.21.19 22.22	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.21.19 22.22	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.21.19 22.22	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.21.19 22.22	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.21.19 22.22	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.21.19 22.22	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.21.19 22.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	70-130	10.21.19 22.22	
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.21.19 22.22	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-2 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-002	Date Collected:	10.16.19 10.05	Sample Depth:	0 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.18.19 12.30	Basis:	Wet Weight
Seq Number:	3104804				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**110**	5.04	mg/kg	10.18.19 19.13		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.18.19 22.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.18.19 22.50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.18.19 22.50	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.18.19 22.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	10.18.19 22.50	
o-Terphenyl	84-15-1	113	%	70-135	10.18.19 22.50	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-2 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-002	Date Collected:	10.16.19 10.05	Sample Depth:	0 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.21.19 18.23	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.21.19 18.23	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.21.19 18.23	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.21.19 18.23	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.21.19 18.23	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.21.19 18.23	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.21.19 18.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.21.19 18.23	
4-Bromofluorobenzene	460-00-4	113	%	70-130	10.21.19 18.23	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-2 (1'-1.5')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-003	Date Collected:	10.16.19 10.10	Sample Depth:	1 - 1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.18.19 12.30	Basis:	Wet Weight
Seq Number:	3104804				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**103**	4.99	mg/kg	10.18.19 19.18		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.18.19 23.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.18.19 23.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.18.19 23.08	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.18.19 23.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.18.19 23.08	
o-Terphenyl	84-15-1	104	%	70-135	10.18.19 23.08	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-2 (1'-1.5')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-003	Date Collected:	10.16.19 10.10	Sample Depth:	1 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.21.19 18.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.21.19 18.43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.21.19 18.43	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.21.19 18.43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.21.19 18.43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.21.19 18.43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.21.19 18.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	85	%	70-130	10.21.19 18.43	
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.21.19 18.43	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-2 (2'-2.5')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-004	Date Collected:	10.16.19 10.15	Sample Depth:	2 - 2.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.18.19 12.30	Basis:	Wet Weight
Seq Number:	3104804				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**92.6**	4.95	mg/kg	10.18.19 19.23		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.18.19 23.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.18.19 23.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.18.19 23.26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.18.19 23.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.18.19 23.26	
o-Terphenyl	84-15-1	104	%	70-135	10.18.19 23.26	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-2 (2'-2.5')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-004	Date Collected:	10.16.19 10.15	Sample Depth:	2 - 2.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.21.19 19.03	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.21.19 19.03	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.21.19 19.03	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.21.19 19.03	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.21.19 19.03	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.21.19 19.03	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.21.19 19.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.21.19 19.03	
1,4-Difluorobenzene	540-36-3	86	%	70-130	10.21.19 19.03	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH3 (0-10")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-005	Date Collected:	10.16.19 10.20	Sample Depth:	0 - 10 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.18.19 12.30	Basis:	Wet Weight
Seq Number:	3104804				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**271**	4.95	mg/kg	10.18.19 19.28		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.18.19 23.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.18.19 23.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.18.19 23.45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.18.19 23.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	10.18.19 23.45	
o-Terphenyl	84-15-1	105	%	70-135	10.18.19 23.45	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH3 (0-10")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-005	Date Collected:	10.16.19 10.20	Sample Depth:	0 - 10 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.21.19 19.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.21.19 19.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.21.19 19.24	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.21.19 19.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.21.19 19.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.21.19 19.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.21.19 19.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	87	%	70-130	10.21.19 19.24	
4-Bromofluorobenzene	460-00-4	109	%	70-130	10.21.19 19.24	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-4 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-006	Date Collected:	10.16.19 10.25	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.18.19 12.30	Basis:	Wet Weight
Seq Number:	3104804				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**865**	5.02	mg/kg	10.18.19 19.33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.19.19 00.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.19.19 00.03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.19.19 00.03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.19.19 00.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	10.19.19 00.03	
o-Terphenyl	84-15-1	104	%	70-135	10.19.19 00.03	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-4 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-006	Date Collected:	10.16.19 10.25	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.21.19 19.44	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.21.19 19.44	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.21.19 19.44	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.21.19 19.44	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.21.19 19.44	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.21.19 19.44	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.21.19 19.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	10.21.19 19.44	
1,4-Difluorobenzene	540-36-3	87	%	70-130	10.21.19 19.44	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-5 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-007	Date Collected:	10.16.19 10.30	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.21.19 14.15	Basis:	Wet Weight
Seq Number:	3104929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**107**	5.00	mg/kg	10.21.19 14.49		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.19.19 00.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.19.19 00.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.19.19 00.21	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.19.19 00.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	10.19.19 00.21	
o-Terphenyl	84-15-1	103	%	70-135	10.19.19 00.21	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-5 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-007	Date Collected:	10.16.19 10.30	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.21.19 20.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.21.19 20.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.21.19 20.04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.21.19 20.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.21.19 20.04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.21.19 20.04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.21.19 20.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	10.21.19 20.04	
4-Bromofluorobenzene	460-00-4	119	%	70-130	10.21.19 20.04	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-6 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-008	Date Collected:	10.16.19 10.35	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.21.19 14.15	Basis:	Wet Weight
Seq Number:	3104929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**39.6**	5.05	mg/kg	10.21.19 15.03		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.19.19 00.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.19.19 00.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.19.19 00.39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.19.19 00.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.19.19 00.39	
o-Terphenyl	84-15-1	102	%	70-135	10.19.19 00.39	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-6 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-008	Date Collected:	10.16.19 10.35	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.21.19 20.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.21.19 20.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.21.19 20.24	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.21.19 20.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.21.19 20.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.21.19 20.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.21.19 20.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	122	%	70-130	10.21.19 20.24	
1,4-Difluorobenzene	540-36-3	84	%	70-130	10.21.19 20.24	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-7 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-009	Date Collected:	10.16.19 10.40	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.21.19 14.15	Basis:	Wet Weight
Seq Number:	3104929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.26**	5.05	mg/kg	10.21.19 15.08		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.19.19 00.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.19.19 00.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.19.19 00.57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.19.19 00.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.19.19 00.57	
o-Terphenyl	84-15-1	102	%	70-135	10.19.19 00.57	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-7 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-009	Date Collected:	10.16.19 10.40	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.15	Basis:	Wet Weight
Seq Number:	3104984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.22.19 05.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.22.19 05.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.22.19 05.03	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	10.22.19 05.03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.22.19 05.03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.22.19 05.03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.22.19 05.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	10.22.19 05.03	
1,4-Difluorobenzene	540-36-3	72	%	70-130	10.22.19 05.03	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-8 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-010	Date Collected:	10.16.19 10.45	Sample Depth:	0 - 6 In

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.21.19 14.15	Basis:	Wet Weight
Seq Number:	3104929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**460**	4.96	mg/kg	10.21.19 15.13		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.19.19 06.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.19.19 06.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.19.19 06.58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.19.19 06.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	10.19.19 06.58	
o-Terphenyl	84-15-1	102	%	70-135	10.19.19 06.58	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-8 (0-6")**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-010	Date Collected:	10.16.19 10.45	Sample Depth:	0 - 6 In
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.15	Basis:	Wet Weight
Seq Number:	3104984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.22.19 05.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.22.19 05.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.22.19 05.23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	10.22.19 05.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.22.19 05.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.22.19 05.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.22.19 05.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	10.22.19 05.23	
1,4-Difluorobenzene	540-36-3	92	%	70-130	10.22.19 05.23	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-9 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-011	Date Collected:	10.16.19 10.50	Sample Depth:	0 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.21.19 14.15	Basis:	Wet Weight
Seq Number:	3104929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**243**	4.99	mg/kg	10.21.19 15.18		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.19.19 07.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.19.19 07.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.19.19 07.16	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.19.19 07.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	10.19.19 07.16	
o-Terphenyl	84-15-1	104	%	70-135	10.19.19 07.16	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-9 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-011	Date Collected:	10.16.19 10.50	Sample Depth:	0 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.00	Basis:	Wet Weight
Seq Number:	3104981				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	10.21.19 22.43	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	10.21.19 22.43	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	10.21.19 22.43	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	10.21.19 22.43	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	10.21.19 22.43	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	10.21.19 22.43	U	1
Total BTEX		<0.00202	0.00202	mg/kg	10.21.19 22.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	10.21.19 22.43	
1,4-Difluorobenzene	540-36-3	89	%	70-130	10.21.19 22.43	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-10 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-012	Date Collected:	10.16.19 13.05	Sample Depth:	0 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.21.19 14.15	Basis:	Wet Weight
Seq Number:	3104929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**304**	4.98	mg/kg	10.21.19 15.33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.19.19 07.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.19.19 07.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.19.19 07.34	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.19.19 07.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	10.19.19 07.34	
o-Terphenyl	84-15-1	99	%	70-135	10.19.19 07.34	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-10 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-012	Date Collected:	10.16.19 13.05	Sample Depth:	0 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.15	Basis:	Wet Weight
Seq Number:	3104984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	10.22.19 05.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	10.22.19 05.43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	10.22.19 05.43	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	10.22.19 05.43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	10.22.19 05.43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	10.22.19 05.43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	10.22.19 05.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	72	%	70-130	10.22.19 05.43	
4-Bromofluorobenzene	460-00-4	110	%	70-130	10.22.19 05.43	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-11 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-013	Date Collected:	10.16.19 13.10	Sample Depth:	0 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.21.19 14.15	Basis:	Wet Weight
Seq Number:	3104929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**614**	5.03	mg/kg	10.21.19 15.38		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.19.19 07.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.19.19 07.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.19.19 07.53	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.19.19 07.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	10.19.19 07.53	
o-Terphenyl	84-15-1	105	%	70-135	10.19.19 07.53	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-11 (0-1')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-013	Date Collected:	10.16.19 13.10	Sample Depth:	0 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.15	Basis:	Wet Weight
Seq Number:	3104984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	10.22.19 04.43	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	10.22.19 04.43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	10.22.19 04.43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	10.22.19 04.43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	10.22.19 04.43	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	10.22.19 04.43	U	1
Total BTEX		<0.00199	0.00199	mg/kg	10.22.19 04.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	10.22.19 04.43	
1,4-Difluorobenzene	540-36-3	90	%	70-130	10.22.19 04.43	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-11 (1'-1.5')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-014	Date Collected:	10.16.19 13.15	Sample Depth:	1 - 1.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	10.21.19 14.15	Basis:	Wet Weight
Seq Number:	3104929				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**312**	5.02	mg/kg	10.21.19 16.06		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	10.18.19 16.00	Basis:	Wet Weight
Seq Number:	3104814				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.19.19 08.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.19.19 08.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.19.19 08.12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.19.19 08.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	10.19.19 08.12	
o-Terphenyl	84-15-1	101	%	70-135	10.19.19 08.12	

Certificate of Analytical Results 640378

Tetra Tech- Midland, Midland, TX

EOG Klondike Reuse Pit

Sample Id:	**AH-11 (1'-1.5')**	Matrix:	Soil	Date Received:	10.18.19 08.22
Lab Sample Id:	640378-014	Date Collected:	10.16.19 13.15	Sample Depth:	1 - 1.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	10.21.19 16.15	Basis:	Wet Weight
Seq Number:	3104984				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	10.22.19 04.22	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	10.22.19 04.22	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	10.22.19 04.22	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	10.22.19 04.22	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	10.22.19 04.22	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	10.22.19 04.22	U	1
Total BTEX		<0.00201	0.00201	mg/kg	10.22.19 04.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	92	%	70-130	10.22.19 04.22	
4-Bromofluorobenzene	460-00-4	96	%	70-130	10.22.19 04.22	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

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

QC Summary 640378

Tetra Tech- Midland

EOG Klondike Reuse Pit

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104804 — Matrix: Solid — Date Prep: 10.18.19
MB Sample Id: 7688428-1-BLK — LCS Sample Id: 7688428-1-BKS — LCSD Sample Id: 7688428-1-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	272	109	267	107	90-110	2	20	mg/kg	10.18.19 17:08	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104929 — Matrix: Solid — Date Prep: 10.21.19
MB Sample Id: 7688536-1-BLK — LCS Sample Id: 7688536-1-BKS — LCSD Sample Id: 7688536-1-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	257	103	254	102	90-110	1	20	mg/kg	10.21.19 14:31	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104804 — Matrix: Soil — Date Prep: 10.18.19
Parent Sample Id: 640388-004 — MS Sample Id: 640388-004 S — MSD Sample Id: 640388-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	37.5	248	287	101	288	101	90-110	0	20	mg/kg	10.18.19 17:23	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104804 — Matrix: Soil — Date Prep: 10.18.19
Parent Sample Id: 640389-007 — MS Sample Id: 640389-007 S — MSD Sample Id: 640389-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	669	200	877	104	885	108	90-110	1	20	mg/kg	10.18.19 18:33	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3104929 — Matrix: Soil — Date Prep: 10.21.19
Parent Sample Id: 640378-007 — MS Sample Id: 640378-007 S — MSD Sample Id: 640378-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	107	250	368	104	372	106	90-110	1	20	mg/kg	10.21.19 14:54	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 640378

Tetra Tech- Midland

EOG Klondike Reuse Pit

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3104929 Matrix: Soil Date Prep: 10.21.19
Parent Sample Id: 640378-014 MS Sample Id: 640378-014 S MSD Sample Id: 640378-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	312	251	572	104	563	100	90-110	2	20	mg/kg	10.21.19 16:11	

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P
Seq Number: 3104814 Matrix: Solid Date Prep: 10.18.19
MB Sample Id: 7688470-1-BLK LCS Sample Id: 7688470-1-BKS LCSD Sample Id: 7688470-1-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)	<15.0	1000	1170	117	1180	118	70-135	1	20	mg/kg	10.18.19 21:18	
Diesel Range Organics (DRO)	<15.0	1000	1030	103	1020	102	70-135	1	20	mg/kg	10.18.19 21:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		125		124		70-135	%	10.18.19 21:18
o-Terphenyl	101		109		109		70-135	%	10.18.19 21:18

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P
Seq Number: 3104814 Matrix: Solid Date Prep: 10.18.19
MB Sample Id: 7688470-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.18.19 21:00	

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P
Seq Number: 3104814 Matrix: Soil Date Prep: 10.18.19
Parent Sample Id: 640378-001 MS Sample Id: 640378-001 S MSD Sample Id: 640378-001 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)	<15.0	998	1190	119	1210	121	70-135	2	20	mg/kg	10.18.19 22:13	
Diesel Range Organics (DRO)	<15.0	998	1140	114	1180	118	70-135	3	20	mg/kg	10.18.19 22:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	128		126		70-135	%	10.18.19 22:13
o-Terphenyl	120		90		70-135	%	10.18.19 22:13

MS/MSD Percent Recovery [D] = 100*(C-A) / B LCS = Laboratory Control Sample MS = Matrix Spike
Relative Percent Difference RPD = 200* | (C-E) / (C+E) | A = Parent Result B = Spike Added
LCS/LCSD Recovery [D] = 100 * (C) / [B] C = MS/LCS Result D = MSD/LCSD % Rec
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result

QC Summary 640378

Tetra Tech- Midland

EOG Klondike Reuse Pit

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104981 — Matrix: Solid — Date Prep: 10.21.19
MB Sample Id: 7688612-1-BLK — LCS Sample Id: 7688612-1-BKS — LCSD Sample Id: 7688612-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.109	109	0.104	104	70-130	5	35	mg/kg	10.21.19 16:03	
Toluene	<0.00200	0.100	0.110	110	0.107	107	70-130	3	35	mg/kg	10.21.19 16:03	
Ethylbenzene	<0.00200	0.100	0.123	123	0.120	120	70-130	2	35	mg/kg	10.21.19 16:03	
m,p-Xylenes	<0.00400	0.200	0.248	124	0.242	121	70-130	2	35	mg/kg	10.21.19 16:03	
o-Xylene	<0.00200	0.100	0.126	126	0.125	125	70-130	1	35	mg/kg	10.21.19 16:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	85		90		88		70-130	%	10.21.19 16:03
4-Bromofluorobenzene	103		125		124		70-130	%	10.21.19 16:03

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104984 — Matrix: Solid — Date Prep: 10.21.19
MB Sample Id: 7688615-1-BLK — LCS Sample Id: 7688615-1-BKS — LCSD Sample Id: 7688615-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.109	109	0.104	104	70-130	5	35	mg/kg	10.21.19 16:03	
Toluene	<0.00200	0.100	0.110	110	0.107	107	70-130	3	35	mg/kg	10.21.19 16:03	
Ethylbenzene	<0.00200	0.100	0.123	123	0.120	120	70-130	2	35	mg/kg	10.21.19 16:03	
m,p-Xylenes	<0.00400	0.200	0.248	124	0.242	121	70-130	2	35	mg/kg	10.21.19 16:03	
o-Xylene	<0.00200	0.100	0.126	126	0.125	125	70-130	1	35	mg/kg	10.21.19 16:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	85		90		88		70-130	%	10.21.19 16:03
4-Bromofluorobenzene	103		125		124		70-130	%	10.21.19 16:03

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3104981 — Matrix: Soil — Date Prep: 10.21.19
Parent Sample Id: 640553-001 — MS Sample Id: 640553-001 S — MSD Sample Id: 640553-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0907	91	0.0870	87	70-130	4	35	mg/kg	10.21.19 16:44	
Toluene	<0.00199	0.0994	0.0895	90	0.0865	87	70-130	3	35	mg/kg	10.21.19 16:44	
Ethylbenzene	<0.00199	0.0994	0.0976	98	0.0946	95	70-130	3	35	mg/kg	10.21.19 16:44	
m,p-Xylenes	<0.00398	0.199	0.196	98	0.190	95	70-130	3	35	mg/kg	10.21.19 16:44	
o-Xylene	<0.00199	0.0994	0.0999	101	0.0970	97	70-130	3	35	mg/kg	10.21.19 16:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		90		70-130	%	10.21.19 16:44
4-Bromofluorobenzene	117		117		70-130	%	10.21.19 16:44

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 640378

Tetra Tech- Midland

EOG Klondike Reuse Pit

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3104984 Matrix: Soil Date Prep: 10.21.19

Parent Sample Id: 640378-014 MS Sample Id: 640378-014 S MSD Sample Id: 640378-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0814	81	0.0776	78	70-130	5	35	mg/kg	10.22.19 03:03	
Toluene	<0.00202	0.101	0.0822	81	0.0757	76	70-130	8	35	mg/kg	10.22.19 03:03	
Ethylbenzene	<0.00202	0.101	0.0903	89	0.0806	81	70-130	11	35	mg/kg	10.22.19 03:03	
m,p-Xylenes	<0.00403	0.202	0.182	90	0.160	80	70-130	13	35	mg/kg	10.22.19 03:03	
o-Xylene	<0.00202	0.101	0.0960	95	0.0840	84	70-130	13	35	mg/kg	10.22.19 03:03	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		90		70-130	%	10.22.19 03:03
4-Bromofluorobenzene	120		111		70-130	%	10.22.19 03:03

MS/MSD Percent Recovery	[D] = 100*(C-A) / B	LCS = Laboratory Control Sample	MS = Matrix Spike
Relative Percent Difference	RPD = 200* | (C-E) / (C+E) |	A = Parent Result	B = Spike Added
LCS/LCSD Recovery	[D] = 100 * (C) / [B]	C = MS/LCS Result	D = MSD/LCSD % Rec
Log Difference	Log Diff. = Log(Sample Duplicate) - Log(Original Sample)	E = MSD/LCSD Result	

Analysis Request of Chain of Custody Record

1046378

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste
401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: EOG	**Site Manager:** Clair Gonzales
Project Name: Klondike Reuse Pit	
Project Location: (county, state) Lea Co NM	**Project #:**
Invoice to:	
Receiving Laboratory: Xenco	**Sampler Signature:** Clint Merritt
Comments: Bill Direct to EOG Attention Todd Wells	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	# CONTAINERS	FILTERED (Y/N)
	AH-1 (0-1')	10/16/2019	10:00		X			X	1	
	AH-2 (0-1')	10/16/2019	10:05		X			X	1	
	AH-2 (1'-1.5')	10/16/2019	10:10		X			X	1	
	AH-2 (2'-2.5')	10/16/2019	10:15		X			X	1	
	AH-3 (0-10")	10/16/2019	10:20		X			X	1	
	AH-4 (0-6")	10/16/2019	10:25		X			X	1	
	AH-5 (0-6")	10/16/2019	10:30		X			X	1	
	AH-6 (0-6")	10/16/2019	10:35		X			X	1	
	AH-7 (0-6")	10/16/2019	10:40		X			X	1	
	AH-8 (0-6")	10/16/2019	10:45		X			X	1	

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	TOX	Hold
X		X												X					
X		X												X					
X		X												X					
X		X												X					
X		X												X					
X		X												X					
X		X												X					
X		X												X					
X		X												X					
X		X												X					

Relinquished by: Buck Mon	Date: 10-18-22	Time:	Received by:	Date: 10/19/19	Time: 8:22
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY

Sample Temperature

2.3 | 2.1
-0.2 | 2.9

REMARKS:

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

Analysis Request of Chain of Custody Record

640378

Tetra Tech, Inc.

4000 N. Big Spring Street, Ste 401 Midland,Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: EOG
Site Manager: Clair Gonzales
Project Name: Klondike Reuse Pit
Project Location: (county, state) Lea Co NM
Project #:
Invoice to:
Receiving Laboratory: Xenco
Sampler Signature: Clint Merritt
Comments: Bill Direct to EOG Attention Todd Wells

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	TIME	MATRIX: WATER	SOIL		PRESERVATIVE METHOD: HCL	HNO_3	ICE			# CONTAINERS	FILTERED (Y/N)
	AH-9 (0-1')	10/16/2019	10:50		X				X			1	
	AH-10 (0-1')	10/16/2019	13:05		X				X			1	
	AH-11 (0-1')	10/16/2019	13:10		X				X			1	
	AH-11 (1'-1.5')	10/16/2019	13:15		X				X			1	

ANALYSIS REQUEST (Circle or Specify Method No.)

SAMPLE IDENTIFICATION	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	TOX			Hold
AH-9 (0-1')	X		X												X							
AH-10 (0-1')	X		X												X							
AH-11 (0-1')	X		X												X							
AH-11 (1'-1.5')	X		X												X							

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	10-22-18		[signature] 10/18		[signature]

LAB USE ONLY
Sample Temperature: 2.3/2.1

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: ______

ORIGINAL COPY

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

March 12, 2020

MIKE CARMONA

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: KLONDIKE REUSE PIT

Enclosed are the results of analyses for samples received by the laboratory on 03/11/20 15:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: BOTTOM HOLE #1 (1' BEB) (H000772-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.6 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	03/12/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *100 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *110 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: BOTTOM HOLE #2 (1.5' BEB) (H000772-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**416**	16.0	03/12/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *98.8 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *105 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: NORTH 1 SIDEWALL (H000772-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**400**	16.0	03/12/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *95.3 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *103 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: NORTH 2 SIDEWALL (H000772-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.5 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**416**	16.0	03/12/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *104 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *112 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: EAST 1 SIDEWALL (H000772-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	03/12/2020	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *96.7 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *104 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: EAST 2 SIDEWALL (H000772-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	03/12/2020	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *96.2 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *103 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: SOUTH 1 SIDEWALL (H000772-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**672**	16.0	03/12/2020	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *98.4 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *107 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: SOUTH 2 SIDEWALL (H000772-08)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	03/12/2020	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *95.5 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *103 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: WEST 1 SIDEWALL (H000772-09)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	03/12/2020	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *97.7 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *108 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TETRA TECH
MIKE CARMONA
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/11/2020	Sampling Date:	03/11/2020
Reported:	03/12/2020	Sampling Type:	Soil
Project Name:	KLONDIKE REUSE PIT	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01978	Sample Received By:	Jodi Henson
Project Location:	EOG - LEA CO, NM		

Sample ID: WEST 2 SIDEWALL (H000772-10)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/11/2020	ND	1.81	90.4	2.00	10.7	
Toluene*	<0.050	0.050	03/11/2020	ND	1.81	90.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	03/11/2020	ND	1.83	91.4	2.00	10.7	
Total Xylenes*	<0.150	0.150	03/11/2020	ND	5.28	88.0	6.00	11.0	
Total BTEX	<0.300	0.300	03/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	03/12/2020	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/12/2020	ND	212	106	200	2.42	
DRO >C10-C28*	<10.0	10.0	03/12/2020	ND	231	115	200	3.13	
EXT DRO >C28-C36	<10.0	10.0	03/12/2020	ND					

Surrogate: 1-Chlorooctane *96.8 %* *44.3-144*

Surrogate: 1-Chlorooctadecane *107 %* *42.2-156*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record

Page 1 of 1

Tetra Tech, Inc.

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

Client Name: EOG	Site Manager: Mike Carmona
Project Name: Klondike Reuse Pit	
Project Location: (county, state) Lea Co, NM	Project #: 212C-MD-01978
Invoice to: EOG - Todd Wells	
Receiving Laboratory: Cardinal	Sampler Signature: Conner Moehring
Comments:	

HD0077Z

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: None	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)
1	Bottom Hole #1 (1' BEB)	3/11/20			X				X			1	N
2	Bottom Hole #2 (1.5' BEB)	3/11/20			X				X			1	N
3	NORTH 1 SIDEWALL	3/11/20			X				X			1	N
4	NORTH 2 SIDEWALL	3/11/20			X				X			1	N
5	EAST 1 SIDEWALL	3/11/20			X				X			1	N
6	EAST 2 SIDEWALL	3/11/20			X				X			1	N
7	SOUTH 1 SIDEWALL	3/11/20			X				X			1	N
8	SOUTH 2 SIDEWALL	3/11/20			X				X			1	N
9	WEST 1 SIDEWALL	3/11/20			X				X			1	N
10	WEST 2 SIDEWALL	3/11/20			X				X			1	N

ANALYSIS REQUEST (Circle or Specify Method No.)

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

Relinquished by: Conner Moehring Date: 3/11/2020 Time: 1545

Received by: Jodi Henson Date: 3/11/20 Time: 15:45

Relinquished by: Date: Time:

Received by: Date: Time:

Relinquished by: Date: Time:

Received by: Date: Time:

LAB USE ONLY

Sample Temperature 3.4°c #113

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

Analytical Report 655684

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Klondike Reuse Pit

212C-MD-01978

16-MAR-20

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

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

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

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

16-MAR-20

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

Reference: XENCO Report No(s): **655684**
Klondike Reuse Pit
Project Address: Lea Co, NM

Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 655684. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 655684 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

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

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

Sample Cross Reference 655684

Tetra Tech- Midland, Midland, TX

Klondike Reuse Pit

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South 1 Sidewall	S	03-13-20 00:00		655684-001

CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Klondike Reuse Pit

Project ID: *212C-MD-01978*
Work Order Number(s): *655684*

Report Date: *16-MAR-20*
Date Received: *03/13/2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3119634 BTEX by EPA 8021B

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

Certificate of Analysis Summary 655684

Tetra Tech- Midland, Midland, TX

Project Name: Klondike Reuse Pit

Project Id: 212C-MD-01978
Contact: Mike Carmona
Project Location: Lea Co, NM

Date Received in Lab: Fri Mar-13-20 02:55 pm
Report Date: 16-MAR-20
Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	655684-001						
	Field Id:	South 1 Sidewall						
	Depth:							
	Matrix:	SOIL						
	Sampled:	Mar-13-20 00:00						
BTEX by EPA 8021B	***Extracted:***	Mar-13-20 18:00						
	Analyzed:	Mar-14-20 01:05						
	Units/RL:	mg/kg	RL					
Benzene		<0.00199	0.00199					
Toluene		<0.00199	0.00199					
Ethylbenzene		<0.00199	0.00199					
m,p-Xylenes		<0.00398	0.00398					
o-Xylene		<0.00199	0.00199					
Total Xylenes		<0.00199	0.00199					
Total BTEX		<0.00199	0.00199					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Mar-13-20 16:40						
	Analyzed:	Mar-13-20 17:10						
	Units/RL:	mg/kg	RL					
Chloride		<9.98	9.98					
TPH By SW8015 Mod	***Extracted:***	Mar-13-20 17:30						
	Analyzed:	Mar-13-20 17:43						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0					
Diesel Range Organics (DRO)		40.1	50.0					
Motor Oil Range Hydrocarbons (MRO)		51.3	50.0					
Total TPH		91.4	50.0					

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

Jessica Kramer
Project Manager

Final 1.000

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

Form 2 - Surrogate Recoveries

Project Name: Klondike Reuse Pit

Work Orders : 655684,

Project ID: 212C-MD-01978

Lab Batch #: 3119703 **Sample:** 655684-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/13/20 17:43

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.1	100	90	70-135	
o-Terphenyl	49.5	50.0	99	70-135	

Lab Batch #: 3119634 **Sample:** 655684-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/14/20 01:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	70-130	
4-Bromofluorobenzene	0.0290	0.0300	97	70-130	

Lab Batch #: 3119703 **Sample:** 7698918-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/13/20 15:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.9	100	93	70-135	
o-Terphenyl	48.3	50.0	97	70-135	

Lab Batch #: 3119634 **Sample:** 7698870-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/13/20 23:02

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	70-130	
4-Bromofluorobenzene	0.0281	0.0300	94	70-130	

Lab Batch #: 3119703 **Sample:** 7698918-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/13/20 14:25

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	53.5	50.0	107	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Klondike Reuse Pit

Work Orders : 655684,

Project ID: 212C-MD-01978

Lab Batch #: 3119634 **Sample:** 7698870-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/13/20 23:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	70-130	
4-Bromofluorobenzene	0.0286	0.0300	95	70-130	

Lab Batch #: 3119703 **Sample:** 7698918-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/13/20 14:45

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	53.1	50.0	106	70-135	

Lab Batch #: 3119634 **Sample:** 7698870-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 03/13/20 23:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0326	0.0300	109	70-130	
4-Bromofluorobenzene	0.0276	0.0300	92	70-130	

Lab Batch #: 3119703 **Sample:** 655684-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/13/20 18:03

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	49.7	50.0	99	70-135	

Lab Batch #: 3119634 **Sample:** 655684-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/14/20 00:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	70-130	
4-Bromofluorobenzene	0.0274	0.0300	91	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Klondike Reuse Pit

Work Orders : 655684,

Project ID: 212C-MD-01978

Lab Batch #: 3119703 **Sample:** 655684-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/13/20 18:23

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	49.6	50.0	99	70-135	

Lab Batch #: 3119634 **Sample:** 655684-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 03/14/20 00:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0326	0.0300	109	70-130	
4-Bromofluorobenzene	0.0285	0.0300	95	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: Klondike Reuse Pit

Work Order #: 655684 **Project ID:** 212C-MD-01978

Analyst: MAB **Date Prepared:** 03/13/2020 **Date Analyzed:** 03/13/2020

Lab Batch ID: 3119634 **Sample:** 7698870-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00200	0.100	0.109	109	0.100	0.107	107	2	70-130	35	
Toluene	<0.00200	0.100	0.105	105	0.100	0.102	102	3	70-130	35	
Ethylbenzene	<0.00200	0.100	0.0998	100	0.100	0.0963	96	4	71-129	35	
m,p-Xylenes	<0.00400	0.200	0.206	103	0.200	0.199	100	3	70-135	35	
o-Xylene	<0.00200	0.100	0.104	104	0.100	0.100	100	4	71-133	35	

Analyst: MAB **Date Prepared:** 03/13/2020 **Date Analyzed:** 03/13/2020

Lab Batch ID: 3119636 **Sample:** 7698872-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<10.0	250	258	103	250	259	104	0	90-110	20	

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

BS / BSD Recoveries

Project Name: Klondike Reuse Pit

Work Order #: 655684 **Project ID:** 212C-MD-01978

Analyst: DTH **Date Prepared:** 03/13/2020 **Date Analyzed:** 03/13/2020

Lab Batch ID: 3119703 **Sample:** 7698918-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	982	98	1000	962	96	2	70-135	35	
Diesel Range Organics (DRO)	<50.0	1000	1070	107	1000	1060	106	1	70-135	35	

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

Form 3 - MS / MSD Recoveries

Project Name: Klondike Reuse Pit

Work Order # : 655684 **Project ID:** 212C-MD-01978

Lab Batch ID: 3119634 **QC- Sample ID:** 655684-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/14/2020 **Date Prepared:** 03/13/2020 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00201	0.100	0.111	111	0.0994	0.0966	97	14	70-130	35	
Toluene	<0.00201	0.100	0.102	102	0.0994	0.0892	90	13	70-130	35	
Ethylbenzene	<0.00201	0.100	0.0981	98	0.0994	0.0865	87	13	71-129	35	
m,p-Xylenes	<0.00402	0.201	0.201	100	0.199	0.177	89	13	70-135	35	
o-Xylene	<0.00201	0.100	0.103	103	0.0994	0.0905	91	13	71-133	35	

Lab Batch ID: 3119636 **QC- Sample ID:** 655684-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/13/2020 **Date Prepared:** 03/13/2020 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<9.98	200	212	106	200	218	109	3	90-110	20	

Lab Batch ID: 3119636 **QC- Sample ID:** 655688-009 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/13/2020 **Date Prepared:** 03/13/2020 **Analyst:** MAB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	37.5	198	253	109	198	262	113	3	90-110	20	X

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

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

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

Form 3 - MS / MSD Recoveries

Project Name: Klondike Reuse Pit

Work Order # : 655684 **Project ID:** 212C-MD-01978

Lab Batch ID: 3119703 **QC- Sample ID:** 655684-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 03/13/2020 **Date Prepared:** 03/13/2020 **Analyst:** DTH

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	849	85	1000	878	88	3	70-135	35	
Diesel Range Organics (DRO)	40.1	1000	936	85	1000	946	86	1	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

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

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Analysis Request of Chain of Custody Record

655684

Page 1 of 1

Tetra Tech, Inc.

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

Client Name: EOG

Site Manager: Mike Carmona

Project Name: Klondike Reuse Pit

Project Location (county, state): Lea Co, NM

Project #: 212C-MD-01978

Invoice to: EOG - Todd Wells

Receiving Laboratory: Xenco

Sampler Signature: Conner Moehring

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD 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	Sulfate	TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	Hold
	South 1 Sidewall	3/13/2020			X			X		1	N	X		X												X					

Relinquished by: Conner Moehring Date: 3/13/20 Time: 1455

Received by: Date: 3/13/20 Time: 1455

Relinquished by: Date: Time:

Received by: Date: Time:

Relinquished by: Date: Time:

Received by: Date: Time:

ORIGINAL COPY

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB USE ONLY

Sample Temperature: 2.5

REMARKS:

- [ ] STANDARD
- [X] RUSH: Same Day (24 hr) 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 03.13.2020 02.55.00 PM

Work Order #: 655684

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.5
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**
#5 Custody Seals intact on sample bottles?	**Yes**
#6*Custody Seals Signed and dated?	**Yes**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**No**
#18 Water VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Date: 03.13.2020

Checklist reviewed by: Jessica Kramer Date: 03.16.2020

Jessica Kramer

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

Operator:	OGRID:
EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	7377
	Action Number: 26664
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	7/30/2021