

## SITE INFORMATION

### Report Type: Closure Report

#### General Site Information:

<b>Site:</b>	Goldeneye 18 Federal Com #001H					
<b>Company:</b>	COG Operating LLC					
<b>Section, Township and Range</b>	Unit P	Sec. 12	T 24S	R 31E		
<b>County:</b>	Lea County					
<b>GPS:</b>	32.224747			-103.723299		
<b>Surface Owner:</b>	Federal					

#### Release Data:

<b>Date Released:</b>	10/15/2019
<b>Type Release:</b>	Produced Water
<b>Source of Contamination:</b>	Flowline
<b>Fluid Released:</b>	200 bbl water
<b>Fluids Recovered:</b>	150 bbls water

#### Official Communication:

<b>Name:</b>	Ike Tavaréz		Mike Carmona
<b>Company:</b>	COG Operating, LLC		Tetra Tech
<b>Address:</b>	One Concho Center		901 West Wall Street
	600 W. Illinois Ave.		Suite 100
<b>City:</b>	Midland Texas, 79701		Midland, Texas
<b>Phone number:</b>	(432) 686-3023		(432) 687-8121
<b>Fax:</b>	(432) 684-7137		
<b>Email:</b>	<a href="mailto:itavarez@concho.com">itavarez@concho.com</a>		<a href="mailto:Mike.carmona@tetrattech.com">Mike.carmona@tetrattech.com</a>

#### Site Characterization

<b>Depth to Groundwater:</b>	>50' bgs
<b>Karst</b>	Low

#### Recommended Remedial Action Levels (RRALs)

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



November 24, 2020

Oil Conservation Division, District 1  
1625 North French Drive  
Hobbs, New Mexico 88240

**Re: Closure Report for the COG Operating, LLC, Goldeneye 18 Federal Com #1H, Unit P, Section 12, Township 24 South, Range 31 East, Lea County, New Mexico.**

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating, LLC (COG), to assess a release that occurred at the Goldeneye 18 Federal Com #1H, Unit P, Section 12, Township 24 South, Range 31 East, Lea County, New Mexico (Site). The spill site coordinates are 32.224747°, -103.723299°. The site location is shown on Figures 1 and 2.

## **Background**

According to the State of New Mexico C-141 Initial Report, the leak was discovered on October 15, 2019, and released approximately 200 barrels of produced water due to a damaged flowline. A vacuum truck was dispatched to remove all freestanding fluids, recovering approximately 150 barrels of produced water. The flowline was running along the edge of Buck Jackson Road when it was damaged. The release impacted the area along the road bar ditch and in the pasture, impacting areas measuring 820' long with widths ranging from 12'-80'. The initial C-141 form is included in Appendix A.

## **Site Characterization**

A site characterization was performed for the site, and no lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, subsurface mines, water courses, or floodplains are located within the specified distances. The site is located in a low karst potential area. No water wells were listed within Section 12 on the New Mexico Office of the State Engineer's (NMOSE) database, the Geology and Groundwater Resources of Eddy County (Report 3), or the USGS National Water Information Database. The nearest well is listed in Section 2 on the NMOSE Database, approximately 2.26 miles northwest of the site, and has a reported depth to groundwater of 160' below surface. The groundwater data is shown in Appendix B.

Tetra Tech

901 W Wall Street, Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



### Depth to Water Determination

On August 3, 2020, Scarborough Drilling, Inc was onsite to drill a groundwater determination bore to 55' below ground surface, and within a ½ mile radius of the location. The borehole was left open for 72 hours and checked for the presence of groundwater. No water was detected at 55' below surface. The coordinates are 32.232309 -103.721057. The driller's log is shown in Appendix B

### **Regulatory**

A risk-based evaluation was performed for the site following the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. A site characterization was performed for the site and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. Additionally, the site is located in a low karst potential area. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based on the site characterization, the proposed RRAL for TPH is 2,500 mg/kg (GRO + DRO + MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 10,000 mg/kg.

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

#### Initial Assessment

On December 11, 2019, Tetra Tech personnel were onsite to evaluate and sample the release area. A total of thirteen trenches (T-1 through T-13) were installed in the release footprint to total depths ranging from 0-1' to 5.0' below surface. Deeper samples could not be collected due to a dense formation in the area. Soil samples were collected and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The sample locations are shown on Figure 3.

Referring to Table 1, none of the samples collected showed benzene, total BTEX, or TPH concentrations above the laboratory reporting limits. However, the areas of T-2 through T-12 showed elevated chloride concentrations in the shallow soils, with concentrations highs of 7,230 mg/kg, 9,110 mg/kg, 8,480 mg/kg, 3,400 mg/kg, 10,400 mg/kg, 8,420 mg/kg, 9,060 mg/kg, 16,000 mg/kg, 6,970 mg/kg, 8,400 mg/kg, and 734 mg/kg at depths ranging from 0-1.0' to 4.0' below surface, respectively.



## Remediation Activities and Confirmation Sampling

Before remediation, the Oxy and Solaris pipelines were spotted using a hydro-vac to clear the area for safety concerns.

To remove the chloride impacted soils above the reclamation standard and RRAL, Tetra Tech personnel were onsite from September 1, 2020, through September 26, 2020, to supervise the remediation activities and collect confirmation samples. The areas of trenches (T-2, T-3, T-4, and T-8) were excavated to depths of 3.0'-3.5' below surface. The areas of trenches (T-5, T-7, T-9, and T-10) were excavated to depths of 2.0'-2.5' below surface, and the areas of Trenches (T-6, T-11, T-12, and T-13) was excavated to the depth of 4.0' below surface. The area regarding a pad entrance was excavated to 6" below surface.

A total of forty-nine (49) bottom hole samples were collected (BottomHole-1 through BottomHole-49), and sixty (60) sidewall samples (Sidewall-1 through Sidewall-60) were collected every 200 square feet to ensure proper removal of the contaminated soils. All collected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 2. The excavation depths and confirmation sample locations are shown on Figure 4.

Referring to Table 2, none of the confirmation samples showed TPH, benzene, and total BTEX above the laboratory reporting limits. Additionally, all confirmation samples showed chloride concentrations below the reclamation standard of <600 mg/kg and the below RRAL of <10,000 mg/kg. Approximately 1,140 cubic yards of material were excavated and transported offsite for proper disposal. The area was then backfilled with clean material to surface grade.

## Conclusion

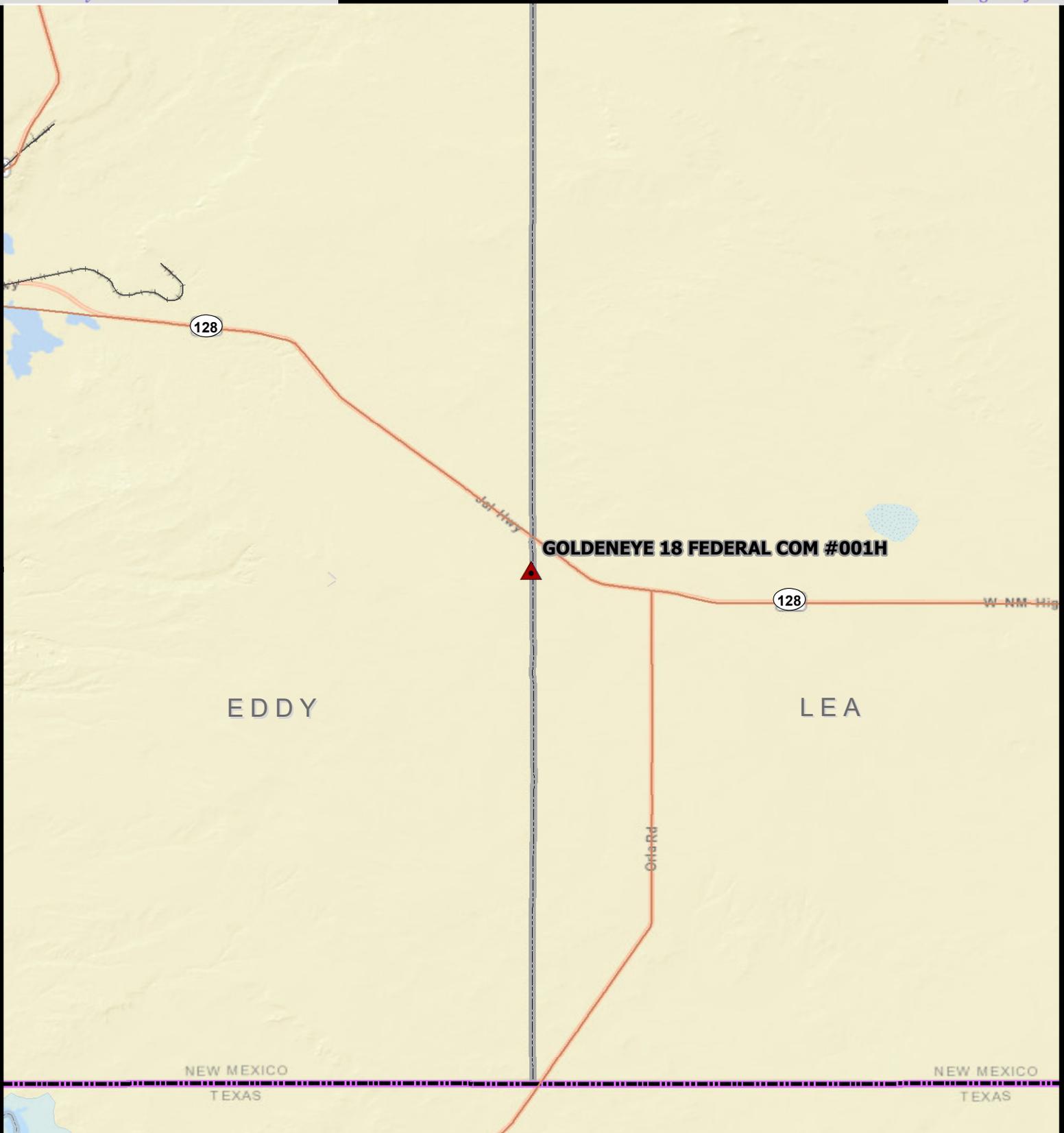
Based on the laboratory results and remediation activities performed, COG requests closure of this spill issue. The final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted,  
TETRA TECH

A handwritten signature in black ink, appearing to read 'Mike Carmona'.

Mike Carmona  
Geologist

# Figures



▲ SITE LOCATION



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

Colorado	Kansas
New Mexico	Oklahoma
	Texas

STATE LOCATOR MAP

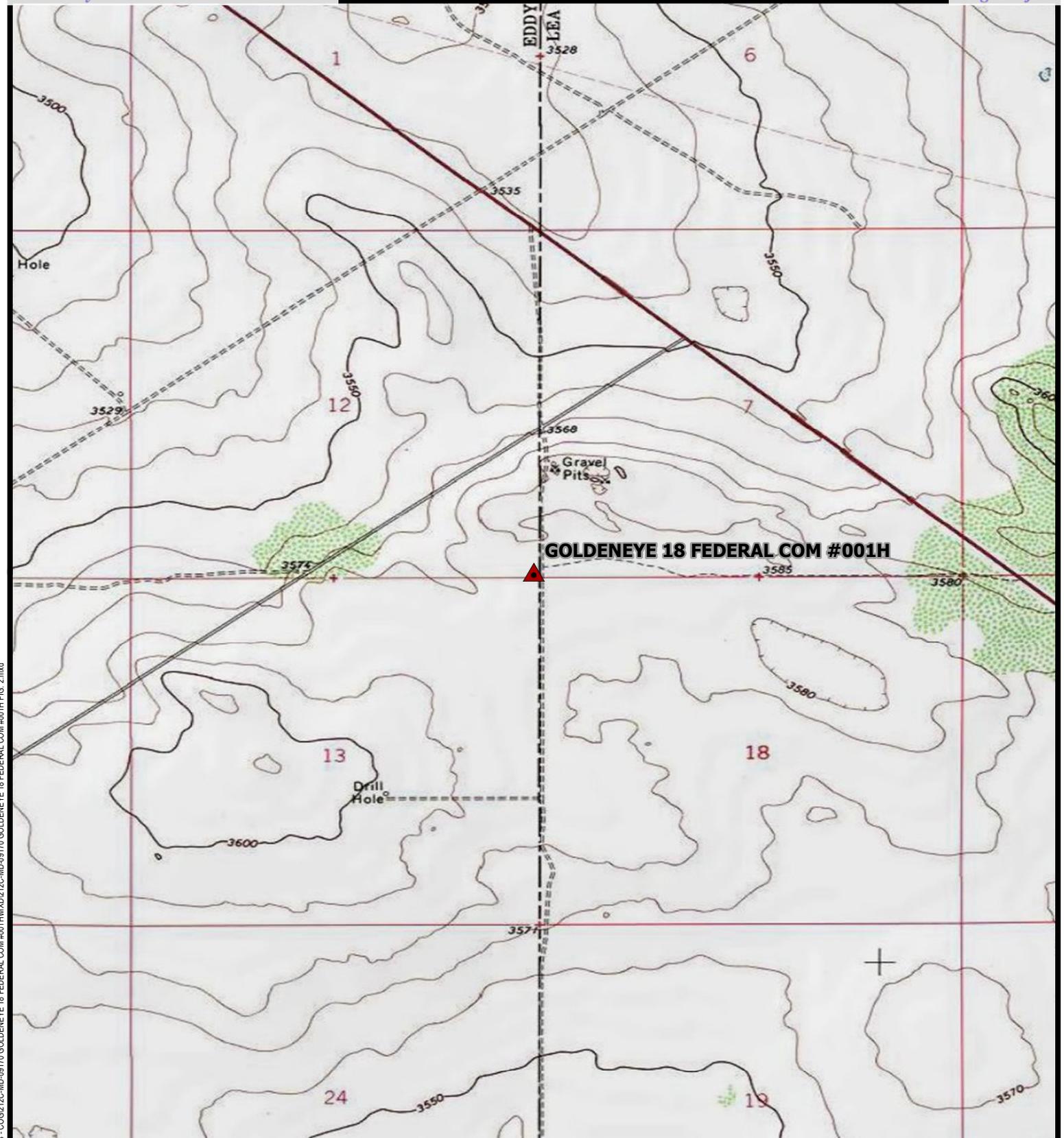
TOPOGRAPHIC MAP  
 GOLDENEYE 18 FEDERAL COM #001H  
 Property Located at coordinates 32.224747°,-103.723299°  
 EDDY COUNTY, NEW MEXICO



Project #:  
212C-MD-01970  
Date: 12-09-2019

FIGURE  
1

Document Path: H:\GIS\CONCHO RESOURCES - COG1212C-MD-09170 GOLDENEYE 18 FEDERAL COM #001H\XD1212C-MD-09170 GOLDENEYE 18 FEDERAL COM #001H FIG. 1.mxd



Date: 12/9/2019 Document Path: H:\GIS\CONCHO RESOURCES - COG\212C-MD-09170 GOLDENEYE 18 FEDERAL COM #001H\FIG. 2.mxd

 SITE LOCATION



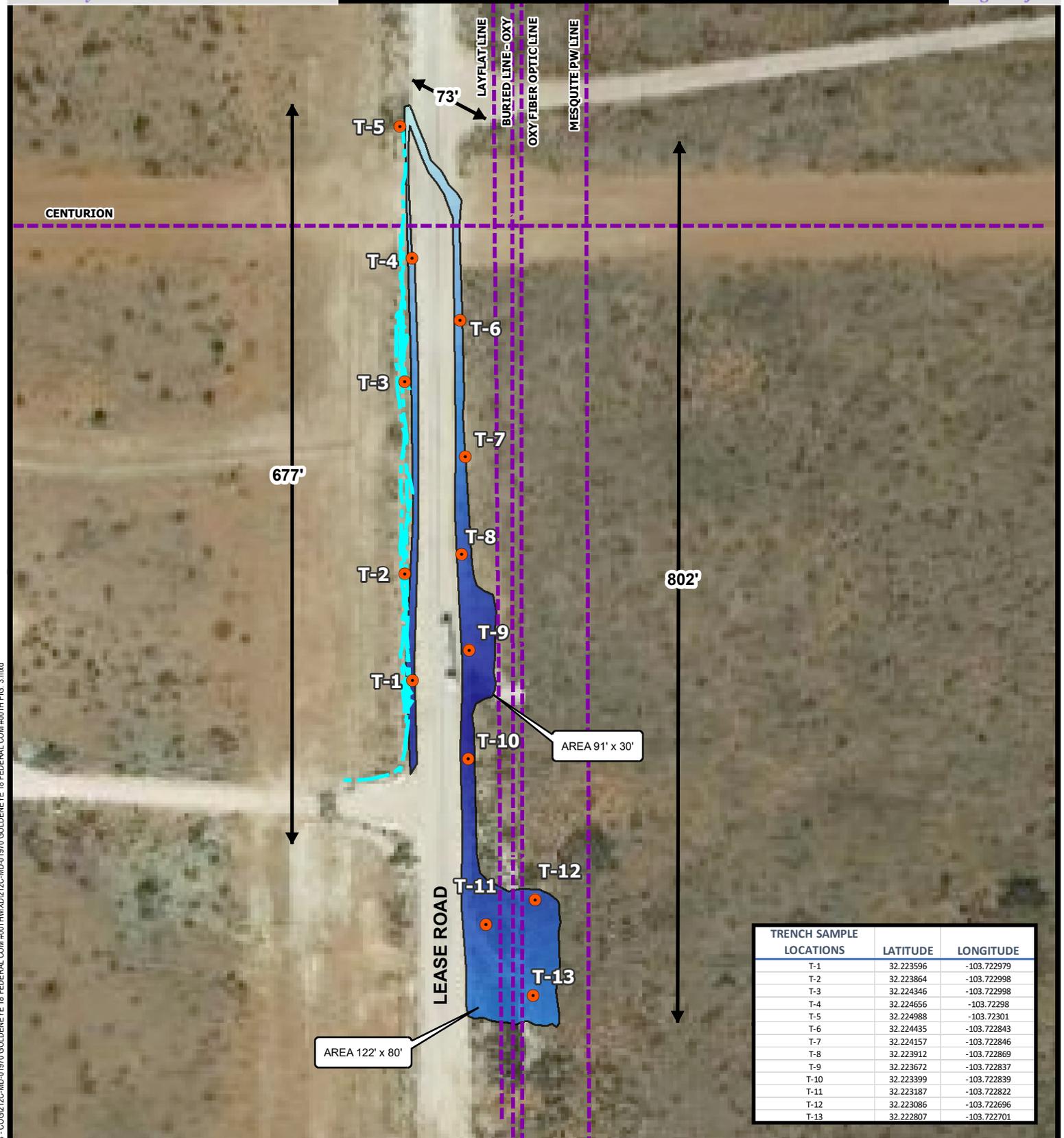
0 1,000 2,000  
Approximate Scale in Feet

TOPOGRAPHIC MAP  
GOLDENEYE 18 FEDERAL COM #001H  
Property Located at coordinates 32.224747°,-103.723299°  
EDDY COUNTY, NEW MEXICO



Project #:  
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FIGURE  
2



TRENCH SAMPLE LOCATIONS	LATITUDE	LONGITUDE
T-1	32.223596	-103.722979
T-2	32.223864	-103.722998
T-3	32.224346	-103.722998
T-4	32.224656	-103.72298
T-5	32.224988	-103.72301
T-6	32.224435	-103.722843
T-7	32.224157	-103.722846
T-8	32.223912	-103.722869
T-9	32.223672	-103.722837
T-10	32.223399	-103.722839
T-11	32.223187	-103.722822
T-12	32.223086	-103.722696
T-13	32.222807	-103.722701

- TRENCH SAMPLE LOCATIONS
- FLOWLINES
- BURIED LINES
- AFFECTED SPILL AREA

Approximate Scale in Feet

0      60      120

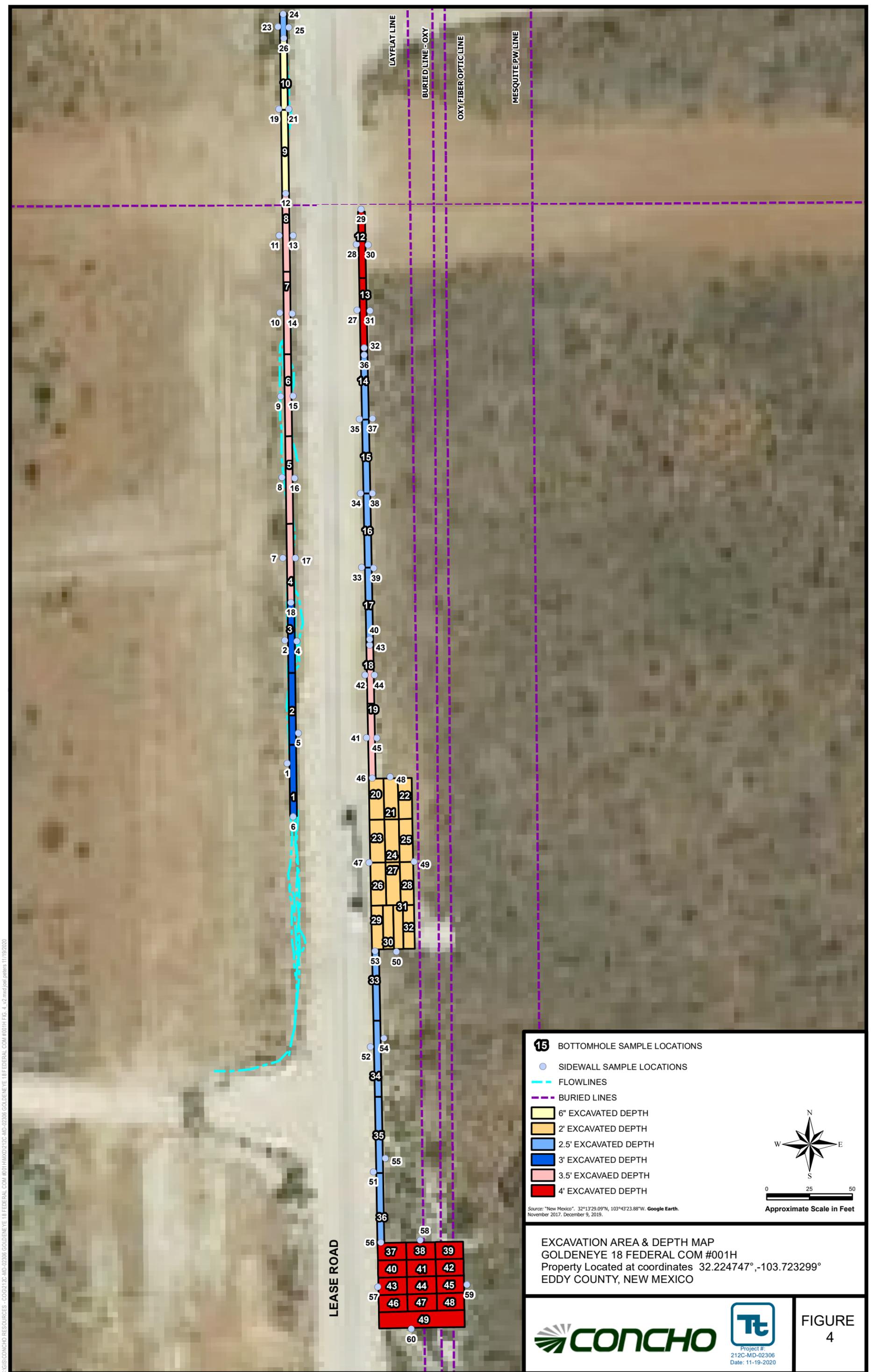
**SPILL ASSESSMENT MAP**  
**GOLDENEYE 18 FEDERAL COM #001H**  
 Property Located at coordinates 32.224747°, -103.723299°  
 EDDY COUNTY, NEW MEXICO

Date: 12/18/2019 Document Path: H:\GIS\CONCHO RESOURCES - COG\212C-MD-01970 GOLDENEYE 18 FEDERAL COM #001H\FIG. 3.mxd

Source: "New Mexico", 32°13'29.09"N, 103°43'23.88"W, Google Earth, November 2017, December 9, 2019.

Project #:  
212C-MD-01970  
Date: 12-09-2019

FIGURE  
3



C:\GIS\CONCHO RESOURCES - COG\212C-MD-02306 GOLDENEYE 18 FEDERAL COM #001H FIG. 4\_12.mxd (see details 11/19/2020)

# Tables

**Table 1**  
**COG**  
**Goldeneye 18 Federal Com #1H**  
**Lea County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	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	GRO+DRO	ORO	Total						
T-1	12/11/19	0-1	-	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	141
	"	1	-	X		-	-	-	-	-	-	-	-	-	-	72.4
	"	2	-	X		-	-	-	-	-	-	-	-	-	-	81.0
	"	3	-	X		-	-	-	-	-	-	-	-	-	-	303
	"	4	-	X		-	-	-	-	-	-	-	-	-	-	325
T-2	12/11/19	0-1	-		X	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	4,790
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	7,230
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	3,540
	"	3	-	X		-	-	-	-	-	-	-	-	-	-	540
T-3	12/11/19	0-1	-		X	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	9,110
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	7,370
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	3,800
	"	3	-		X	-	-	-	-	-	-	-	-	-	-	1,300
T-4	12/11/19	0-1	-		X	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	8,480
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	4,900
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	521
	"	3	-		X	-	-	-	-	-	-	-	-	-	-	793
T-5	12/11/19	0-1	-		X	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	3,400
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	2,830
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	2,890
T-6	12/11/19	0-1	-		X	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	8,350
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	2,600
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	10,400
	"	3	-		X	-	-	-	-	-	-	-	-	-	-	2,360
T-7	12/11/19	0-1	-		X	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	7,430
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	8,420
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	6,450
T-8	12/11/19	0-1	-		X	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	9,060
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	8,490
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	8,450
	"	3	-		X	-	-	-	-	-	-	-	-	-	-	4,070
T-9	12/11/19	0-1	-		X	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	16,000
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	6,710

**Table 1**  
**COG**  
**Goldeneye 18 Federal Com #1H**  
**Lea County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	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	GRO+DRO	ORO	Total						
T-10	12/11/19	0-1	-		X	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	6,970
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	5,350
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	828
T-11	12/11/19	0-1	-		X	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6,830
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	7,420
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	6,630
	"	3	-		X	-	-	-	-	-	-	-	-	-	-	6,470
	"	4	-		X	-	-	-	-	-	-	-	-	-	-	8,400
"	5	-		X	-	-	-	-	-	-	-	-	-	-	7,690	
T-12	12/11/19	0-1	-		X	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	7.43
	"	1	-		X	-	-	-	-	-	-	-	-	-	-	11.7
	"	2	-		X	-	-	-	-	-	-	-	-	-	-	702
	"	3	-		X	-	-	-	-	-	-	-	-	-	-	734
	"	4	-		X	-	-	-	-	-	-	-	-	-	-	207
"	5	-		X	-	-	-	-	-	-	-	-	-	-	17.0	
T-13	12/11/19	0-1	-	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	7.68
	"	1	-	X		-	-	-	-	-	-	-	-	-	-	52.3
	"	2	-	X		-	-	-	-	-	-	-	-	-	-	544

(-) Not Analyzed

 Excavated

**Table 2**  
**COG**  
**Goldeneye 18 Federal Com #1H**  
**Lea County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	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	GRO+DRO	ORO	Total						
Bottom Hole-1	9/4/2020	-	3.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	75.3
Bottom Hole-2	9/4/2020	-	3.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	90.7
Bottom Hole-3	9/4/2020	-	3.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	84.1
Bottom Hole-4	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	113
Bottom Hole-5	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	122
Bottom Hole-6	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	106
Bottom Hole-7	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	102
Bottom Hole-8	9/11/2020	-	3.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	96.1
Bottom Hole-9	9/11/2020	-	0.5	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<5.05
Bottom Hole-10	9/11/2020	-	0.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	190
Bottom Hole-11	9/11/2020	-	2.5	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	170
Bottom Hole-12	9/4/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	316
Bottom Hole-13	9/4/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	344
Bottom Hole-14	9/4/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	89.7
Bottom Hole-15	9/4/2020	-	2.5	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	86.5
Bottom Hole-16	9/4/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	74.2
Bottom Hole-17	9/4/2020	-	2.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	90.4
Bottom Hole-18	9/4/2020	-	3.5	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	52.9
Bottom Hole-19	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	51.8
Bottom Hole-20	9/25/2020	-	2.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	19.2
Bottom Hole-21	9/25/2020	-	2.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	20.5
Bottom Hole-22	9/25/2020	-	2.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	18.1
Bottom Hole-23	9/25/2020	-	2.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	19.1
Bottom Hole-24	9/25/2020	-	2.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	23.0
Bottom Hole-25	9/25/2020	-	2.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	22.5
Bottom Hole-26	9/25/2020	-	2.0	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	20.1
Bottom Hole-27	9/25/2020	-	2.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	22.2
Bottom Hole-28	9/25/2020	-	2.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	21.9

**Table 2**  
**COG**  
**Goldeneye 18 Federal Com #1H**  
**Lea County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	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	GRO+DRO	ORO	Total						
Bottom Hole-29	9/25/2020	-	2.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	25.1
Bottom Hole-30	9/25/2020	-	2.0	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	25.0
Bottom Hole-31	9/25/2020	-	2.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	24.5
Bottom Hole-32	9/25/2020	-	2.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	22.2
Bottom Hole-33	9/25/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	20.7
Bottom Hole-34	9/25/2020	-	2.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	21.6
Bottom Hole-35	9/25/2020	-	2.5	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	21.3
Bottom Hole-36	9/25/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	0.00230	<0.00199	<0.00199	0.00230	23.1
Bottom Hole-37	9/25/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2860
Bottom Hole-38	9/25/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	2030
Bottom Hole-39	9/25/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	2020
Bottom Hole-40	9/25/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	1960
Bottom Hole-41	9/25/2020	-	4.0	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	1900
Bottom Hole-42	9/25/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	2350
Bottom Hole-43	9/25/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	820
Bottom Hole-44	9/25/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	639
Bottom Hole-45	9/25/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	662
Bottom Hole-46	9/25/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	598
Bottom Hole-47	9/25/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	467
Bottom Hole-48	9/25/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	1830
Bottom Hole-49	9/25/2020	-	4.0	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	2220
SW-1	9/4/2020	-	3.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	79.3
SW-2	9/4/2020	-	3.0	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	79.6
SW-3	9/4/2020	-	3.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	75.4
SW-4	9/4/2020	-	3.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	76.8
SW-5	9/4/2020	-	3.0	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	83.2
SW-6	9/4/2020	-	3.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	77.4
SW-7	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	576

**Table 2**  
**COG**  
**Goldeneye 18 Federal Com #1H**  
**Lea County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	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	GRO+DRO	ORO	Total						
SW-8	9/11/2020	-	3.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	105
SW-9	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	111
SW-10	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	91.8
SW-11	9/11/2020	-	3.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	126
SW-12	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	99.1
SW-13	9/11/2020	-	3.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	89.4
SW-14	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	103
SW-15	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	102
SW-16	9/11/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	108
SW-17	9/11/2020	-	3.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	107
SW-18	9/11/2020	-	3.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	101
SW-19	9/11/2020	-	0.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<4.95
SW-20	9/11/2020	-	0.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<5.02
SW-21	9/11/2020	-	0.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<4.95
SW-22	9/11/2020	-	0.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<5.05
SW-23	9/11/2020	-	2.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	196
SW-24	9/11/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	181
SW-25	9/11/2020	-	2.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	203
SW-26	9/11/2020	-	2.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	198
SW-27	9/4/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	378
SW-28	9/4/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	339
SW-29	9/4/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	337
SW-30	9/4/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	370
SW-31	9/4/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	343
SW-32	9/4/2020	-	4.0	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	86.2
SW-33	9/4/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	85.7
SW-34	9/4/2020	-	2.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	93.6
SW-35	9/4/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	82.7

**Table 2**  
**COG**  
**Goldeneye 18 Federal Com #1H**  
**Lea County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	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	GRO+DRO	ORO	Total						
SW-36	9/4/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	81.9
SW-37	9/4/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	84.1
SW-38	9/4/2020	-	2.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	79.4
SW-39	9/4/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	84.2
SW-40	9/4/2020	-	2.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	97.9
SW-41	9/4/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	55.2
SW-42	9/4/2020	-	3.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	53.9
SW-43	9/4/2020	-	3.5	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	56.9
SW-44	9/4/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	58.9
SW-45	9/4/2020	-	3.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	48.9
SW-46	9/4/2020	-	3.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	47.7
SW-47	9/25/2020	-	2.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	5.80
SW-48	9/25/2020	-	2.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<5.02
SW-49	9/25/2020	-	2.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<4.98
SW-50	9/25/2020	-	2.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<4.99
SW-51	9/25/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<5.03
SW-52	9/25/2020	-	2.5	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<4.98
SW-53	9/25/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<5.03
SW-54	9/25/2020	-	2.5	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<4.96
SW-55	9/25/2020	-	2.5	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<4.99
SW-56	9/25/2020	-	2.5	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<4.95
SW-57	9/25/2020	-	4.0	X		<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<5.04
SW-58	9/25/2020	-	4.0	X		<49.8	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<4.99
SW-59	9/25/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	5.31
SW-60	9/25/2020	-	4.0	X		<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<4.98

(-) Not Analyzed

# Photos

Goldeneye 18 Fed Com #1H

Lea County, New Mexico



TETRA TECH



View North, area of Bottomholes 1 through 3



View South, area of Bottomholes 4 through 6

Goldeneye 18 Fed Com #1H

Lea County, New Mexico



TETRA TECH



View South, area of Bottomholes 7 and 8



View North, area of Bottomhole 11

Goldeneye 18 Fed Com #1H

Lea County, New Mexico



TETRA TECH



View South, area of Bottomholes 12 and 13



View North, area of 14 through 17

Goldeneye 18 Fed Com #1H

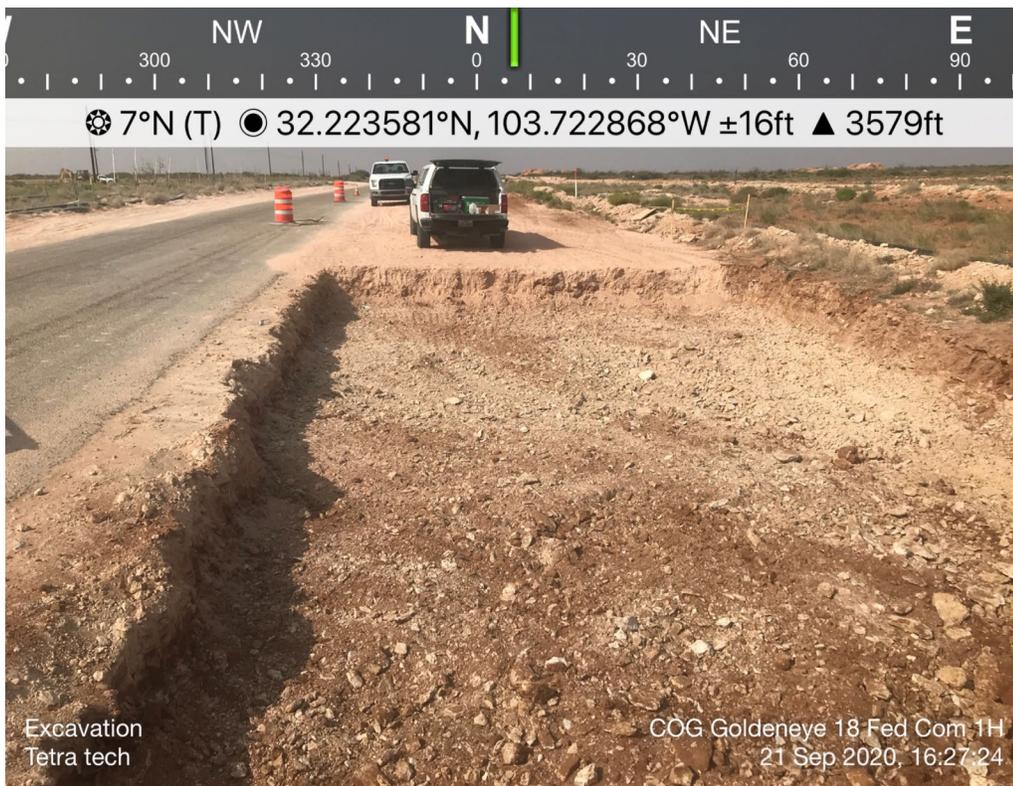
Lea County, New Mexico



TETRA TECH



View North, area of Bottomholes 18 and 19



View North, area of bottomholes 20 through 32

Goldeneye 18 Fed Com #1H

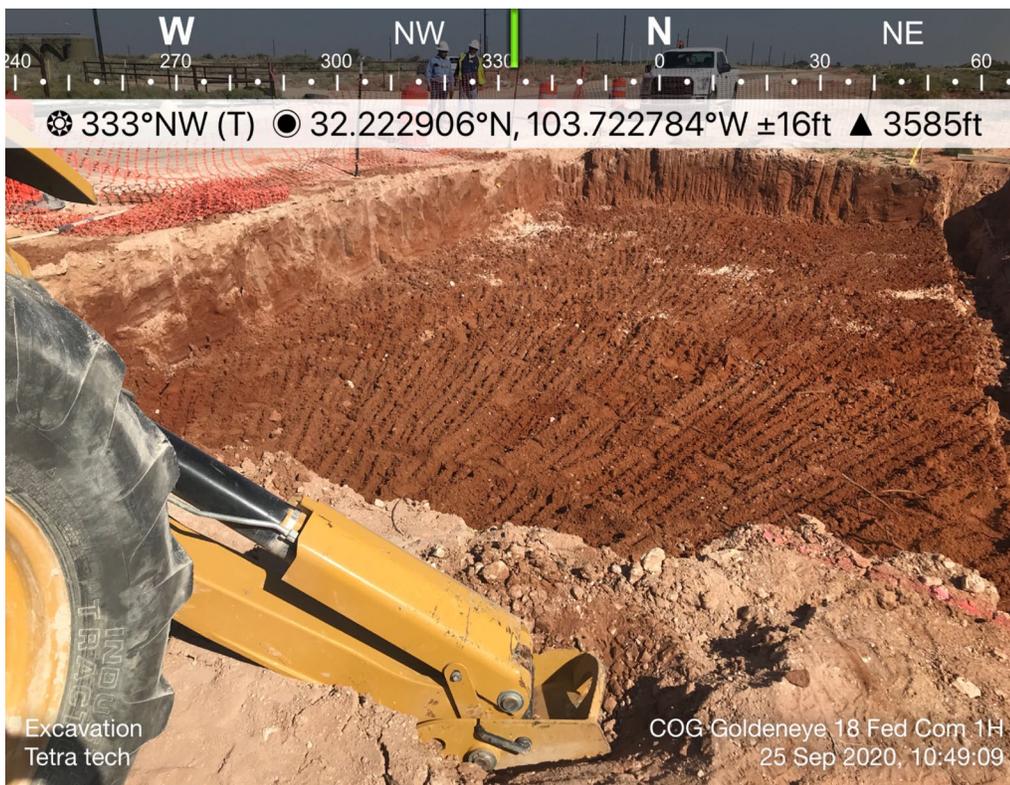
Lea County, New Mexico



TETRA TECH



View South, area of Bottomholes 33 through 36



View North, area of Bottomholes 37, 40, 43, and 46

Goldeneye 18 Fed Com #1H

Lea County, New Mexico



TETRA TECH



View South, area of Bottomholes 38 through 49

# 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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

### Location of Release Source

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

State of New Mexico  
Oil Conservation Division

Page 2

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

### Initial Response

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

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

Incident ID	NRM1935137204
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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

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

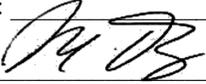
State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	NRM1935137204
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:  \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: Cristina Eads \_\_\_\_\_ Date: 11/30/2020 \_\_\_\_\_

State of New Mexico  
Oil Conservation Division

Page 6

Incident ID	NRM1935137204
District RP	
Facility ID	
Application ID	

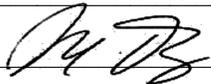
### Closure

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

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

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

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_  
 Signature:  \_\_\_\_\_ Date: \_\_\_\_\_  
 email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: Cristina Eads Date: 11/30/2020

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: 02/05/2021  
 Printed Name: Cristina Eads Title: Environmental Specialist

\*\*\*\*\* LIQUID SPILLS - VOLUME CALCULATIONS \*\*\*\*\*

Location of spill: COG -Goldeneye 18 Fed Com 1H

Date of Spill: 15-Oct-2019

If the leak/spill is associated with production equipment, i.e. - wellhead, stuffing box, flowline, tank battery, production vessel, transfer pump, or storage tank place an "X" here:

Input Data:

If spill volumes from measurement, i.e. metering, tank volumes, etc. are known enter the volumes here: OIL: 0.0 BBL WATER: 0.0 BBL

If "known" spill volumes are given, input data for the following "Area Calculations" is optional. The above will override the calculated volumes.

Total Area Calculations						Standing Liquid Calculations							
Total Surface Area	width	length	wet soil depth	oil (%)	Standing Liquid Area	width	length	liquid depth	oil (%)				
Rectangle Area #1	450 ft	12 ft	X	4.50 in	0%	Rectangle Area #1	0 ft	X	0 ft	X	0 in	0%	
Rectangle Area #2	0 ft	X	0 ft	X	0.00 in	0%	Rectangle Area #2	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #3	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #3	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #4	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #4	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #5	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #5	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%	Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%

okay

production system leak - DAILY PRODUCTION DATA REQUIRED

Average Daily Production: Oil 0 BBL Water 0 BBL 0 Gas (MCFD)

Total Hydrocarbon Content in gas: 0% (percentage)

Did leak occur before the separator?:  YES  N/A (place an "X")

H2S Content in Produced Gas: 0 PPM

H2S Content in Tank Vapors: 0 PPM

Amount of Free Liquid Recovered: 0 BBL okay

Percentage of Oil in Free Liquid Recovered: 0% (percentage)

Liquid holding factor \*: 0.14 gal per gal

Use the following when the spill wets the grains of the soil.

Use the following when the liquid completely fills the pore space of the soil:

- \* Sand = 0.08 gallon (gal.) liquid per gal. volume of soil.
- \* Gravelly (caliche) loam = 0.14 gal. liquid per gal. volume of soil.
- \* Sandy clay loam soil = 0.14 gal liquid per gal. volume of soil.
- \* Clay loam = 0.16 gal. liquid per gal. volume of soil.

- Occurs when the spill soaked soil is contained by barriers, natural (or not).
- \* Clay loam = 0.20 gal. liquid per gal. volume of soil.
- \* Gravelly (caliche) loam = 0.25 gal. liquid per gal. volume of soil.
- \* Sandy loam = 0.5 gal. liquid per gal. volume of soil.

Total Solid/Liquid Volume: 5,400 sq. ft. 2,025 cu. ft. cu. ft. Total Free Liquid Volume: sq. ft. cu. ft. cu. ft.

Estimated Volumes Spilled

Liquid in Soil: 50.5 BBL H2O 0.0 BBL OIL  
 Free Liquid: 0.0 BBL 0.0 BBL  
 Totals: 50.5 BBL 0.0 BBL

Estimated Production Volumes Lost

Estimated Production Spilled: 0.0 BBL H2O 0.0 BBL OIL

Estimated Surface Damage

Surface Area: 5,400 sq. ft.  
 Surface Area: .1240 acre

Recovered Volumes

Estimated oil recovered: BBL check - okay  
 Estimated water recovered: BBL check - okay

Estimated Weights, and Volumes

Saturated Soil = 226,800 lbs 2,025 cu. ft. 75 cu. yds.  
 Total Liquid = 50 BBL 2,121 gallon 17,643 lbs

Air Emission from flowline leaks:

Volume of oil spill: - BBL  
 Separator gas calculated: - MCF  
 Separator gas released: - MCF  
 Gas released from oil: - lb  
 H2S released: - lb  
 Total HC gas released: - lb  
 Total HC gas released: - MCF

Air Emission of Reporting Requirements:

New Mexico Texas  
 HC gas release reportable? NO NO  
 H2S release reportable? NO NO

## Appendix B

**Water Well Data  
Average Depth to Groundwater (ft)  
COG - Goldeneye 18 Fed Com #1H  
Lea County, New Mexico**

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

23 South			31 East		
6	5	4	3	2	1
85	354	168			
7	8	9	10	11	12
140					
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
	140			100	
31	32	33	34	35	36

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

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

24 South			31 East		
6	5	4	3	2	1
				205	
				160	
7	8	9	10	11	12
					Site
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
		474			

24 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
					290

25 South			30 East		
6	5	4	3	2	1
				295	
7	264	8	9	295	12
					390
18	17	16	15	14	13
19	20	21	22	23	24
		265			
		268			
30	29	28	27	26	25
31	32	33	34	35	36

25 South			31 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
		390			
		290			
30	29	28	27	26	25
31	32	33	34	35	36

25 South			32 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36
		290			

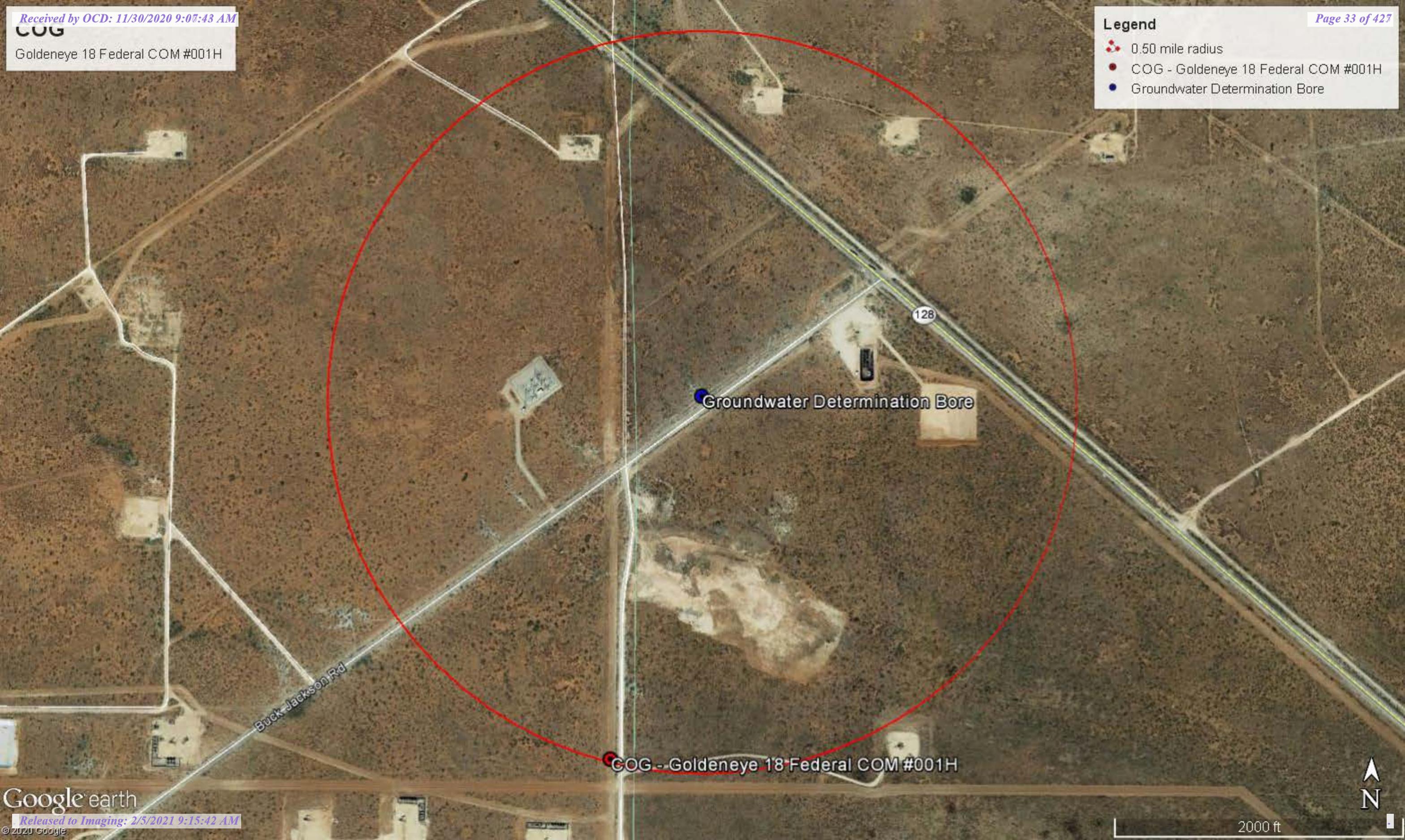
- 88** New Mexico State Engineers Well Reports
- 105** USGS Well Reports
- 90** Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)  
Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34** NMOCD - Groundwater Data
- 123** Tetra Tech installed temporary wells and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

COG

Goldeneye 18 Federal COM #001H

**Legend**

- 0.50 mile radius
- COG - Goldeneye 18 Federal COM #001H
- Groundwater Determination Bore



Groundwater Determination Bore

COG - Goldeneye 18 Federal COM #001H

Buck Jackson Rd

128



2000 ft



# 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-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<a href="#">C 02405</a>	CUB	ED		4	1	02	24S	31E		617690	3568631*	275	160	115
<a href="#">C 02440</a>	C	ED		2	3	10	24S	31E		616103	3566599*	350		
<a href="#">C 02460</a>	C	ED			3	02	24S	31E		617496	3568022*	320		
<a href="#">C 02460 POD2</a>	C	ED			3	02	24S	31E		617496	3568022*	320		
<a href="#">C 02464</a>	C	ED		3	4	1	02	24S	31E	617589	3568530*	320	205	115
<a href="#">C 02661</a>	CUB	ED		3	3	1	04	24S	31E	613969	3568485*	708		
<a href="#">C 02783</a>	CUB	ED		3	3	1	04	24S	31E	613911	3568461	708		
<a href="#">C 02783 POD2</a>	CUB	ED		3	3	1	04	24S	31E	613911	3568461	672		
<a href="#">C 02784</a>	C	ED		4	2	4	04	24S	31E	613911	3568461	584		
<a href="#">C 02785</a>	CUB	ED		3	3	1	04	24S	31E	613969	3568485*	692		

Average Depth to Water: **182 feet**

Minimum Depth: **160 feet**

Maximum Depth: **205 feet**

**Record Count:** 10

**PLSS Search:**

**Township:** 24S

**Range:** 31E

\*UTM location was derived from PLSS - see Help

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



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### National Water Information System: Mapper

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



#### Site Information



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Contact USGS  
Search USGS

## National Water Information System: Web Interface

[USGS Water Resources](#)

<b>Data Category:</b> Groundwater	<b>Geographic Area:</b> United States	GO
--------------------------------------	--	----

Click to hide News 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 =**

- 321312103395601

**Minimum number of levels = 1**

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

### USGS 321312103395601 24S.32E.10.344333

**Available data for this site**

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°13'30.4", Longitude 103°39'52.7" NAD83

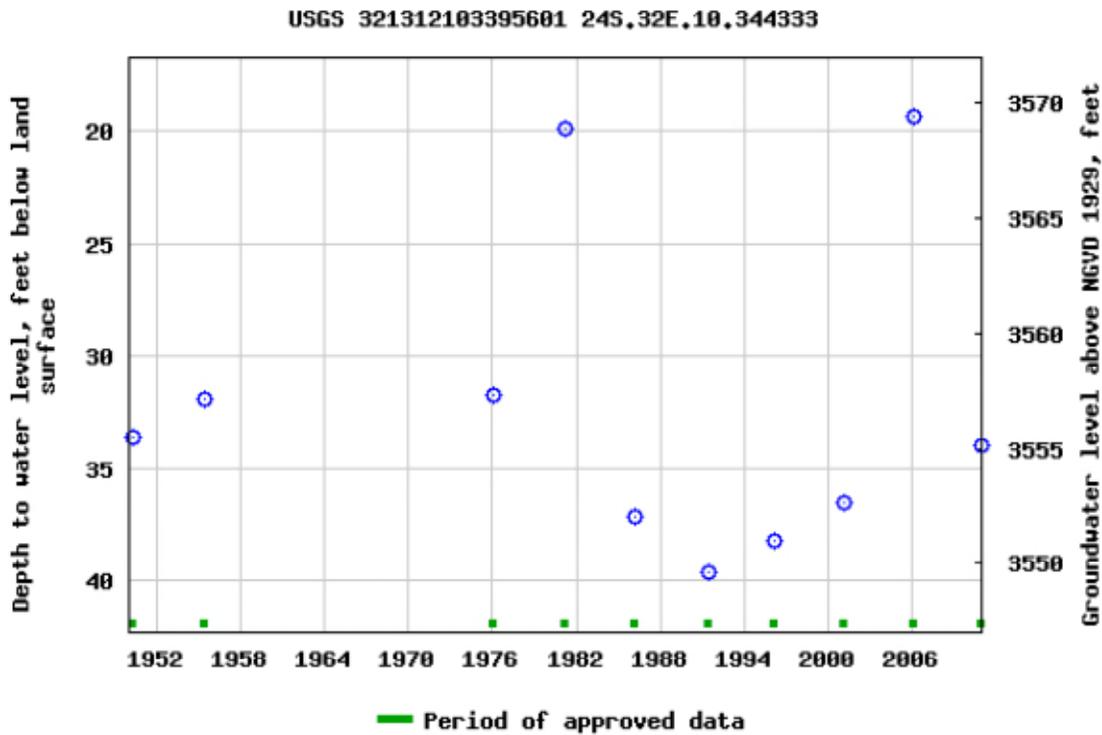
Land-surface elevation 3,589.00 feet above NGVD29

The depth of the well is 60 feet below land surface.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

#### Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>



Breaks in the plot represent a gap of at least one year between field measurements.

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**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: 2019-10-16 14:46:02 EDT

1.05 0.95 nadww01



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Contact USGS  
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## National Water Information System: Web Interface

[USGS Water Resources](#)

Data Category:

Groundwater

Geographic Area:

United States

GO

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Groundwater levels for the Nation

### Search Results -- 1 sites found

site\_no list =

- 321609103445901

Minimum number of levels = 1

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

### USGS 321609103445901 23S.31E.26.34411

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°16'11.9", Longitude 103°45'01.2" NAD83

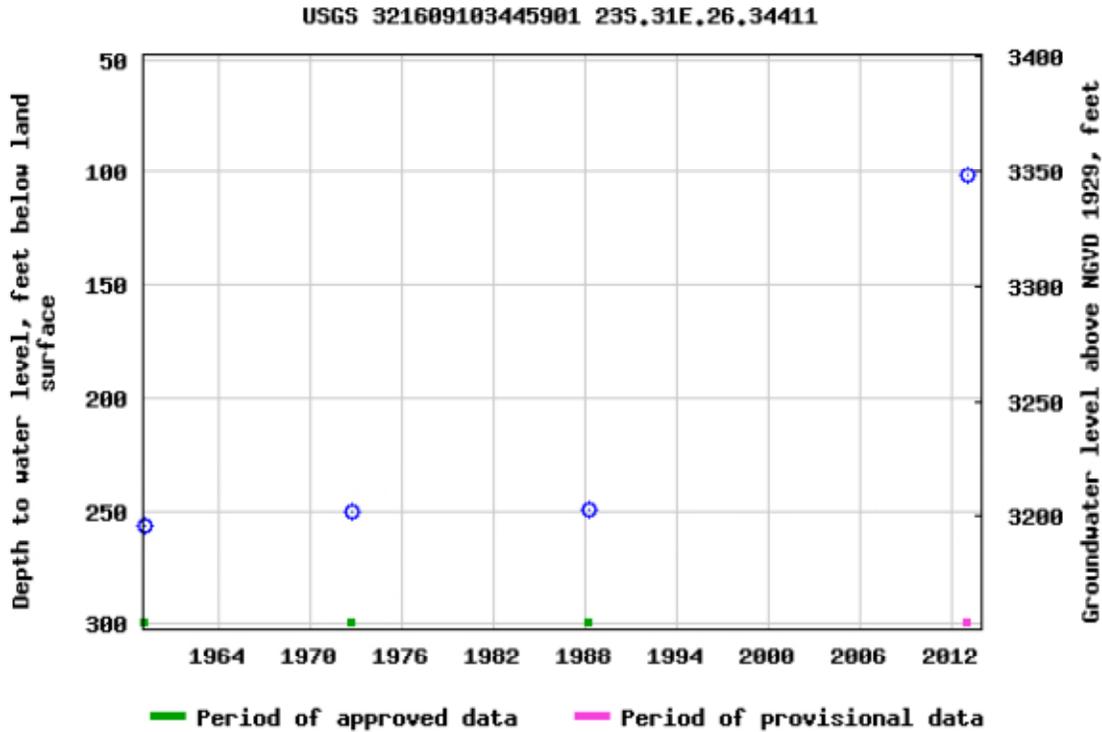
Land-surface elevation 3,451.00 feet above NGVD29

The depth of the well is 365 feet below land surface.

This well is completed in the Dewey Lake Redbeds (312DYLK) local aquifer.

#### Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

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**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: 2019-10-16 14:47:38 EDT

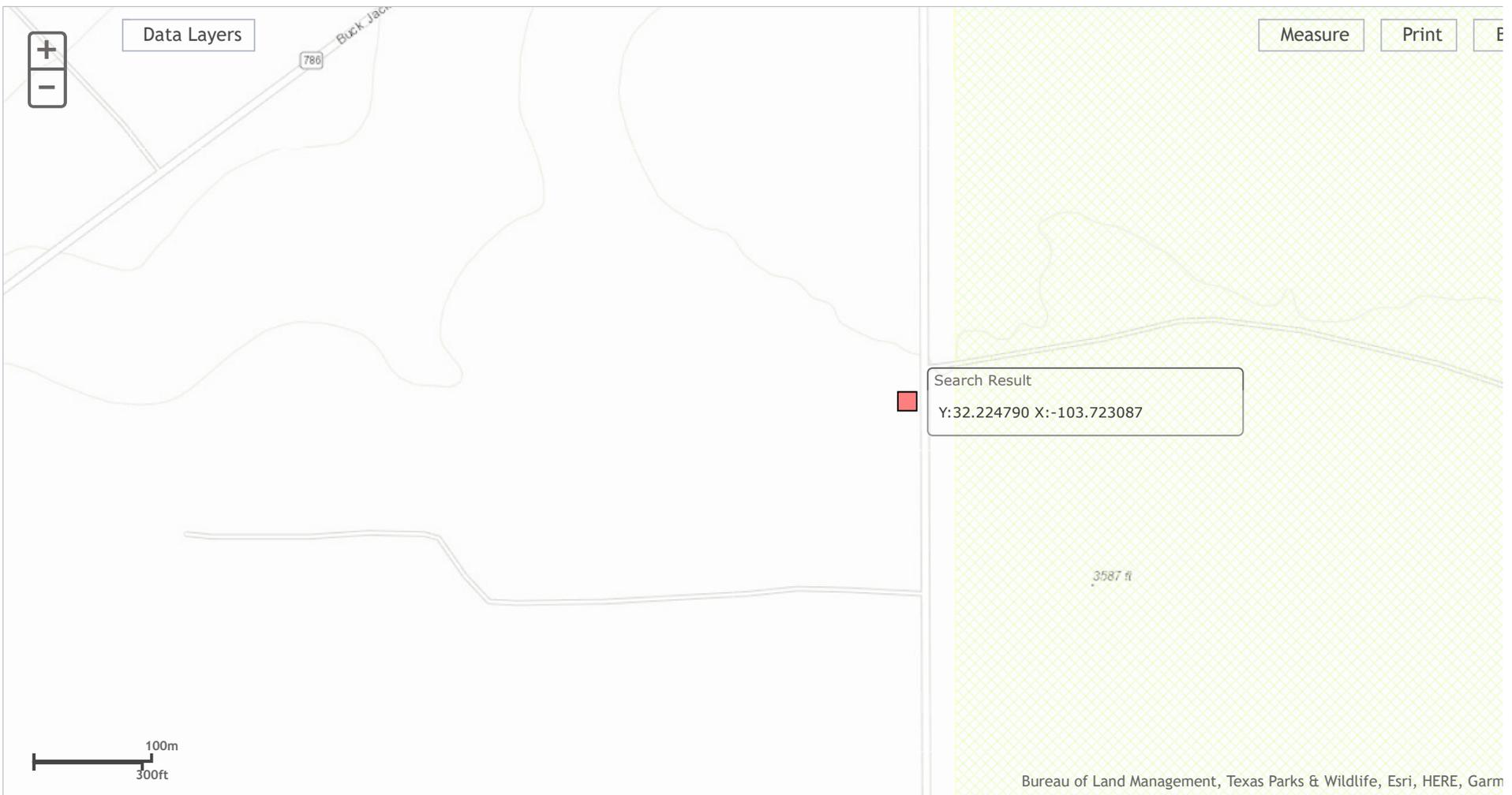
1.03 0.89 nadww01





# NFHL Web Mapping Application

Please select a c



# Appendix C



# Certificate of Analysis Summary 646108

Tetra Tech- Midland, Midland, TX

Project Name: Golden Eye 18 Fed Com 1H

**Project Id:** 212C-MD-01970  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu Dec-12-19 01:05 pm  
**Report Date:** 17-DEC-19  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	646108-001	646108-002	646108-003	646108-004	646108-005	646108-006
	<i>Field Id:</i>	T-1 (0'-1')	T-1 (1')	T-1 (2')	T-1 (3')	T-1 (4')	T-2 (0'-1')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	Dec-12-19 14:30					Dec-12-19 14:30
	<i>Analyzed:</i>	Dec-12-19 17:48					Dec-12-19 18:08
	<i>Units/RL:</i>	mg/kg RL					mg/kg RL
Benzene		<0.00198 0.00198					<0.00200 0.00200
Toluene		<0.00198 0.00198					<0.00200 0.00200
Ethylbenzene		<0.00198 0.00198					<0.00200 0.00200
m,p-Xylenes		<0.00397 0.00397					<0.00399 0.00399
o-Xylene		<0.00198 0.00198					<0.00200 0.00200
Total Xylenes		<0.00198 0.00198					<0.00200 0.00200
Total BTEX		<0.00198 0.00198					<0.00200 0.00200
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00
	<i>Analyzed:</i>	Dec-12-19 19:35	Dec-12-19 19:55	Dec-12-19 20:01	Dec-12-19 20:08	Dec-12-19 20:15	Dec-12-19 20:34
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		141 5.04	72.4 4.99	81.0 4.97	303 4.95	325 4.95	4790 25.3
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	Dec-12-19 14:00					Dec-12-19 14:00
	<i>Analyzed:</i>	Dec-12-19 17:21					Dec-12-19 18:17
	<i>Units/RL:</i>	mg/kg RL					mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0					<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0					<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0					<49.8 49.8
Total TPH		<50.0 50.0					<49.8 49.8

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*Jessica Kramer*

Jessica Kramer  
Project Assistant



# Certificate of Analysis Summary 646108

Tetra Tech- Midland, Midland, TX

Project Name: Golden Eye 18 Fed Com 1H

**Project Id:** 212C-MD-01970  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu Dec-12-19 01:05 pm  
**Report Date:** 17-DEC-19  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	646108-007	646108-008	646108-009	646108-010	646108-011	646108-012
	<i>Field Id:</i>	T-2 (1')	T-2 (2')	T-2 (3')	T-3 (0'-1')	T-3 (1')	T-3 (2')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>				Dec-12-19 14:30		
	<i>Analyzed:</i>				Dec-12-19 18:28		
	<i>Units/RL:</i>				mg/kg RL		
Benzene					<0.00198 0.00198		
Toluene					<0.00198 0.00198		
Ethylbenzene					<0.00198 0.00198		
m,p-Xylenes					<0.00397 0.00397		
o-Xylene					<0.00198 0.00198		
Total Xylenes					<0.00198 0.00198		
Total BTEX					<0.00198 0.00198		
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00
	<i>Analyzed:</i>	Dec-12-19 20:41	Dec-12-19 20:48	Dec-12-19 21:08	Dec-12-19 20:54	Dec-12-19 21:01	Dec-12-19 21:28
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		7230 49.9	3540 24.8	540 5.02	9110 50.0	7370 50.0	3800 24.9
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>				Dec-12-19 14:00		
	<i>Analyzed:</i>				Dec-12-19 18:36		
	<i>Units/RL:</i>				mg/kg RL		
Gasoline Range Hydrocarbons (GRO)					<50.0 50.0		
Diesel Range Organics (DRO)					<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)					<50.0 50.0		
Total TPH					<50.0 50.0		

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*Jessica Kramer*

Jessica Kramer  
Project Assistant



# Certificate of Analysis Summary 646108

Tetra Tech- Midland, Midland, TX

Project Name: Golden Eye 18 Fed Com 1H

**Project Id:** 212C-MD-01970  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu Dec-12-19 01:05 pm  
**Report Date:** 17-DEC-19  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	646108-013	646108-014	646108-015	646108-016	646108-017	646108-018
	<i>Field Id:</i>	T-3 (3')	T-4 (0'-1')	T-4 (1')	T-4 (2')	T-4 (3')	T-5 (0'-1')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>		Dec-12-19 14:30				Dec-12-19 14:30
	<i>Analyzed:</i>		Dec-12-19 18:49				Dec-12-19 19:09
	<i>Units/RL:</i>		mg/kg RL				mg/kg RL
Benzene			<0.00199 0.00199				<0.00198 0.00198
Toluene			<0.00199 0.00199				<0.00198 0.00198
Ethylbenzene			<0.00199 0.00199				<0.00198 0.00198
m,p-Xylenes			<0.00398 0.00398				<0.00396 0.00396
o-Xylene			<0.00199 0.00199				<0.00198 0.00198
Total Xylenes			<0.00199 0.00199				<0.00198 0.00198
Total BTEX			<0.00199 0.00199				<0.00198 0.00198
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:45	Dec-12-19 18:00
	<i>Analyzed:</i>	Dec-12-19 21:34	Dec-12-19 21:54	Dec-12-19 22:01	Dec-12-19 22:08	Dec-12-19 23:14	Dec-12-19 22:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1300 4.95	8480 50.4	4900 25.1	521 4.99	793 5.00	3400 25.2
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>		Dec-12-19 14:00				Dec-12-19 14:00
	<i>Analyzed:</i>		Dec-12-19 18:55				Dec-12-19 19:14
	<i>Units/RL:</i>		mg/kg RL				mg/kg RL
Gasoline Range Hydrocarbons (GRO)			<49.9 49.9				<50.0 50.0
Diesel Range Organics (DRO)			<49.9 49.9				<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)			<49.9 49.9				<50.0 50.0
Total TPH			<49.9 49.9				<50.0 50.0

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Jessica Kramer  
Project Assistant



# Certificate of Analysis Summary 646108

Tetra Tech- Midland, Midland, TX

Project Name: Golden Eye 18 Fed Com 1H

**Project Id:** 212C-MD-01970  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu Dec-12-19 01:05 pm  
**Report Date:** 17-DEC-19  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	646108-019	646108-020	646108-021	646108-022	646108-023	646108-024
	<i>Field Id:</i>	T-5 (1')	T-5 (2')	T-6 (0'-1')	T-6 (1')	T-6(2')	T-6(3')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>			Dec-12-19 14:30			
	<i>Analyzed:</i>			Dec-12-19 19:29			
	<i>Units/RL:</i>			mg/kg RL			
Benzene				<0.00200 0.00200			
Toluene				<0.00200 0.00200			
Ethylbenzene				<0.00200 0.00200			
m,p-Xylenes				<0.00401 0.00401			
o-Xylene				<0.00200 0.00200			
Total Xylenes				<0.00200 0.00200			
Total BTEX				<0.00200 0.00200			
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:00	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45
	<i>Analyzed:</i>	Dec-12-19 22:21	Dec-12-19 22:27	Dec-12-19 22:34	Dec-12-19 23:34	Dec-12-19 23:41	Dec-12-19 23:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2830 25.0	2890 25.0	8350 50.0	2600 24.8	10400 49.9	2360 25.2
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>			Dec-12-19 14:00			
	<i>Analyzed:</i>			Dec-12-19 19:33			
	<i>Units/RL:</i>			mg/kg RL			
Gasoline Range Hydrocarbons (GRO)				<49.9 49.9			
Diesel Range Organics (DRO)				<49.9 49.9			
Motor Oil Range Hydrocarbons (MRO)				<49.9 49.9			
Total TPH				<49.9 49.9			

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*Jessica Kramer*

Jessica Kramer  
Project Assistant



# Certificate of Analysis Summary 646108

Tetra Tech- Midland, Midland, TX

Project Name: Golden Eye 18 Fed Com 1H

**Project Id:** 212C-MD-01970  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu Dec-12-19 01:05 pm  
**Report Date:** 17-DEC-19  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	646108-025	646108-026	646108-027	646108-028	646108-029	646108-030
	<i>Field Id:</i>	T-7 (0'-1')	T-7 (1')	T-7 (2')	T-8 (0'-1')	T-8 (1')	T-8 (2')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	Dec-12-19 14:30			Dec-12-19 14:30		
	<i>Analyzed:</i>	Dec-12-19 19:50			Dec-12-19 20:10		
	<i>Units/RL:</i>	mg/kg RL			mg/kg RL		
Benzene		<0.00200 0.00200			<0.00198 0.00198		
Toluene		<0.00200 0.00200			<0.00198 0.00198		
Ethylbenzene		<0.00200 0.00200			<0.00198 0.00198		
m,p-Xylenes		<0.00401 0.00401			<0.00397 0.00397		
o-Xylene		<0.00200 0.00200			<0.00198 0.00198		
Total Xylenes		<0.00200 0.00200			<0.00198 0.00198		
Total BTEX		<0.00200 0.00200			<0.00198 0.00198		
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45
	<i>Analyzed:</i>	Dec-12-19 23:54	Dec-13-19 00:14	Dec-13-19 00:20	Dec-13-19 00:27	Dec-13-19 00:34	Dec-13-19 00:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		7430 50.1	8420 49.6	6450 50.0	9060 49.7	8490 50.3	8450 50.5
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	Dec-12-19 14:00			Dec-12-19 14:00		
	<i>Analyzed:</i>	Dec-12-19 19:52			Dec-12-19 20:11		
	<i>Units/RL:</i>	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		

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*Jessica Kramer*

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Project Assistant



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Tetra Tech- Midland, Midland, TX

Project Name: Golden Eye 18 Fed Com 1H

**Project Id:** 212C-MD-01970  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu Dec-12-19 01:05 pm  
**Report Date:** 17-DEC-19  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	646108-031	646108-032	646108-033	646108-034	646108-035	646108-036
	<i>Field Id:</i>	T-8 (3')	T-9 (0'-1')	T-9 (1')	T-10 (0'-1')	T-10 (1')	T-10 (2')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>		Dec-12-19 14:30		Dec-12-19 14:30		
	<i>Analyzed:</i>		Dec-12-19 20:31		Dec-12-19 20:51		
	<i>Units/RL:</i>		mg/kg RL		mg/kg RL		
Benzene			<0.00199 0.00199		<0.00202 0.00202		
Toluene			<0.00199 0.00199		<0.00202 0.00202		
Ethylbenzene			<0.00199 0.00199		<0.00202 0.00202		
m,p-Xylenes			<0.00398 0.00398		<0.00403 0.00403		
o-Xylene			<0.00199 0.00199		<0.00202 0.00202		
Total Xylenes			<0.00199 0.00199		<0.00202 0.00202		
Total BTEX			<0.00199 0.00199		<0.00202 0.00202		
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45
	<i>Analyzed:</i>	Dec-13-19 01:07	Dec-13-19 01:14	Dec-13-19 01:33	Dec-13-19 01:40	Dec-13-19 01:47	Dec-13-19 00:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4070 24.8	16000 101	6710 49.8	6970 50.0	5350 25.0	828 5.00
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>		Dec-12-19 14:00		Dec-12-19 14:00		
	<i>Analyzed:</i>		Dec-12-19 20:30		Dec-12-19 20:49		
	<i>Units/RL:</i>		mg/kg RL		mg/kg RL		
Gasoline Range Hydrocarbons (GRO)			<50.0 50.0		<49.9 49.9		
Diesel Range Organics (DRO)			<50.0 50.0		<49.9 49.9		
Motor Oil Range Hydrocarbons (MRO)			<50.0 50.0		<49.9 49.9		
Total TPH			<50.0 50.0		<49.9 49.9		

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Project Assistant



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Tetra Tech- Midland, Midland, TX

Project Name: Golden Eye 18 Fed Com 1H

**Project Id:** 212C-MD-01970  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu Dec-12-19 01:05 pm  
**Report Date:** 17-DEC-19  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	646108-037	646108-038	646108-039	646108-040	646108-041	646108-042
	<i>Field Id:</i>	T-1 (0'-1')	T-11 (1')	T-11 (2')	T-11 (3')	T-11 (4')	T-11 (5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	Dec-12-19 14:30					
	<i>Analyzed:</i>	Dec-12-19 22:30					
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00400 0.00400					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45	Dec-12-19 18:45	Dec-13-19 08:15	Dec-13-19 08:15
	<i>Analyzed:</i>	Dec-13-19 01:53	Dec-13-19 02:00	Dec-13-19 02:07	Dec-13-19 02:13	Dec-13-19 09:14	Dec-13-19 09:21
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		6830 50.2	7420 49.7	6630 49.5	6470 50.4	8400 50.0	7690 50.0
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	Dec-12-19 14:00					
	<i>Analyzed:</i>	Dec-12-19 21:08					
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9					
Diesel Range Organics (DRO)		<49.9 49.9					
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9					
Total TPH		<49.9 49.9					

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Jessica Kramer  
Project Assistant



# Certificate of Analysis Summary 646108

Tetra Tech- Midland, Midland, TX

Project Name: Golden Eye 18 Fed Com 1H

**Project Id:** 212C-MD-01970  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu Dec-12-19 01:05 pm  
**Report Date:** 17-DEC-19  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	646108-043	646108-044	646108-045	646108-046	646108-047	646108-048
	<i>Field Id:</i>	T-12 (0'-1')	T-12 (1')	T-12 (2')	T-12 (3')	T-12 (4')	T-12 (5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	Dec-12-19 14:30					
	<i>Analyzed:</i>	Dec-12-19 22:51					
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00201 0.00201					
Toluene		<0.00201 0.00201					
Ethylbenzene		<0.00201 0.00201					
m,p-Xylenes		<0.00402 0.00402					
o-Xylene		<0.00201 0.00201					
Total Xylenes		<0.00201 0.00201					
Total BTEX		<0.00201 0.00201					
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Dec-13-19 08:15	Dec-13-19 08:15	Dec-13-19 08:15	Dec-13-19 08:15	Dec-13-19 08:15	Dec-13-19 08:15
	<i>Analyzed:</i>	Dec-13-19 08:48	Dec-13-19 09:28	Dec-13-19 09:48	Dec-13-19 09:54	Dec-13-19 11:14	Dec-13-19 11:21
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		7.43 5.00	11.7 4.99	702 4.95	734 4.98	207 4.99	17.0 5.02
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	Dec-12-19 14:00					
	<i>Analyzed:</i>	Dec-12-19 21:27					
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8					
Diesel Range Organics (DRO)		<49.8 49.8					
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8					
Total TPH		<49.8 49.8					

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

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

*Jessica Kramer*

Jessica Kramer  
Project Assistant



# Certificate of Analysis Summary 646108

Tetra Tech- Midland, Midland, TX

Project Name: Golden Eye 18 Fed Com 1H

**Project Id:** 212C-MD-01970  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu Dec-12-19 01:05 pm  
**Report Date:** 17-DEC-19  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	646108-049	646108-050	646108-051			
	<i>Field Id:</i>	T-13 (0'-1')	T-13 (1')	T-1 3(2')			
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Dec-11-19 00:00	Dec-11-19 00:00	Dec-11-19 00:00			
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	Dec-12-19 14:30					
	<i>Analyzed:</i>	Dec-12-19 23:11					
	<i>Units/RL:</i>	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					
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	Dec-13-19 08:15	Dec-13-19 08:15	Dec-13-19 08:15			
	<i>Analyzed:</i>	Dec-13-19 11:28	Dec-13-19 11:34	Dec-13-19 11:54			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		7.68 5.00	52.3 5.00	544 4.95			
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	Dec-12-19 14:00					
	<i>Analyzed:</i>	Dec-12-19 21:46					
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9					
Diesel Range Organics (DRO)		<49.9 49.9					
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9					
Total TPH		<49.9 49.9					

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

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

Jessica Kramer  
Project Assistant

# Analytical Report 646108

for  
**Tetra Tech- Midland**

**Project Manager: Mike Carmona**

**Golden Eye 18 Fed Com 1H**

**212C-MD-01970**

**17-DEC-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 (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)



17-DEC-19

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: XENCO Report No(s): **646108**

**Golden Eye 18 Fed Com 1H**

Project Address: Lea County, New Mexico

**Mike Carmona:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 646108. 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. 646108 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**

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*

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## Sample Cross Reference 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
T-1 (0'-1')	S	12-11-19 00:00		646108-001
T-1 (1')	S	12-11-19 00:00		646108-002
T-1 (2')	S	12-11-19 00:00		646108-003
T-1 (3')	S	12-11-19 00:00		646108-004
T-1 (4')	S	12-11-19 00:00		646108-005
T-2 (0'-1')	S	12-11-19 00:00		646108-006
T-2 (1')	S	12-11-19 00:00		646108-007
T-2 (2')	S	12-11-19 00:00		646108-008
T-2 (3')	S	12-11-19 00:00		646108-009
T-3 (0'-1')	S	12-11-19 00:00		646108-010
T-3 (1')	S	12-11-19 00:00		646108-011
T-3 (2')	S	12-11-19 00:00		646108-012
T-3 (3')	S	12-11-19 00:00		646108-013
T-4 (0'-1')	S	12-11-19 00:00		646108-014
T-4 (1')	S	12-11-19 00:00		646108-015
T-4 (2')	S	12-11-19 00:00		646108-016
T-4 (3')	S	12-11-19 00:00		646108-017
T-5 (0'-1')	S	12-11-19 00:00		646108-018
T-5 (1')	S	12-11-19 00:00		646108-019
T-5 (2')	S	12-11-19 00:00		646108-020
T-6 (0'-1')	S	12-11-19 00:00		646108-021
T-6 (1')	S	12-11-19 00:00		646108-022
T-6(2')	S	12-11-19 00:00		646108-023
T-6(3')	S	12-11-19 00:00		646108-024
T-7 (0'-1')	S	12-11-19 00:00		646108-025
T-7 (1')	S	12-11-19 00:00		646108-026
T-7 (2')	S	12-11-19 00:00		646108-027
T-8 (0'-1')	S	12-11-19 00:00		646108-028
T-8 (1')	S	12-11-19 00:00		646108-029
T-8 (2')	S	12-11-19 00:00		646108-030
T-8 (3')	S	12-11-19 00:00		646108-031
T-9 (0'-1')	S	12-11-19 00:00		646108-032
T-9 (1')	S	12-11-19 00:00		646108-033
T-10 (0'-1')	S	12-11-19 00:00		646108-034
T-10 (1')	S	12-11-19 00:00		646108-035
T-10 (2')	S	12-11-19 00:00		646108-036
T-1 1(0'-1')	S	12-11-19 00:00		646108-037
T-11 (1')	S	12-11-19 00:00		646108-038
T-11 (2')	S	12-11-19 00:00		646108-039
T-11 (3')	S	12-11-19 00:00		646108-040
T-11 (4')	S	12-11-19 00:00		646108-041
T-11 (5')	S	12-11-19 00:00		646108-042
T-12 (0'-1')	S	12-11-19 00:00		646108-043



# Sample Cross Reference 646108

## Tetra Tech- Midland, Midland, TX

### Golden Eye 18 Fed Com 1H

T-12 (1')	S	12-11-19 00:00	646108-044
T-12 (2')	S	12-11-19 00:00	646108-045
T-12 (3')	S	12-11-19 00:00	646108-046
T-12 (4')	S	12-11-19 00:00	646108-047
T-12 (5')	S	12-11-19 00:00	646108-048
T-13 (0'-1')	S	12-11-19 00:00	646108-049
T-13 (1')	S	12-11-19 00:00	646108-050
T-1 3(2')	S	12-11-19 00:00	646108-051



# CASE NARRATIVE

**Client Name: Tetra Tech- Midland**  
**Project Name: Golden Eye 18 Fed Com 1H**

Project ID: 212C-MD-01970  
Work Order Number(s): 646108

Report Date: 17-DEC-19  
Date Received: 12/12/2019

**Sample receipt non conformances and comments:**

None

**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3110379 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 646108-049.

Batch: LBA-3110390 Chloride by EPA 300

Lab Sample ID 646108-050 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 646108-041, -042, -043, -044, -045, -046, -047, -048, -049, -050, -051.

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

Batch: LBA-3110412 Chloride by EPA 300

Lab Sample ID 646108-009 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 646108-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -018, -019, -020, -021.

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

Batch: LBA-3110413 Chloride by EPA 300

Lab Sample ID 646108-036 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 646108-017, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038, -039, -040.

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



## CASE NARRATIVE

*Client Name: Tetra Tech- Midland*

*Project Name: Golden Eye 18 Fed Com 1H*

Project ID: 212C-MD-01970  
Work Order Number(s): 646108

Report Date: 17-DEC-19  
Date Received: 12/12/2019

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Batch: LBA-3110431 BTEX by EPA 8021B

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



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-1 (0'-1')** Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-001 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.12.19 18.00 Basis: Wet Weight  
 Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	141	5.04	mg/kg	12.12.19 19.35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 12.12.19 14.00 Basis: Wet Weight  
 Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.12.19 17.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.12.19 17.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.12.19 17.21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.12.19 17.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	12.12.19 17.21	
o-Terphenyl	84-15-1	112	%	70-135	12.12.19 17.21	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-1 (0'-1')  
 Lab Sample Id: 646108-001

Matrix: Soil  
 Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.12.19 17.48	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.12.19 17.48	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.12.19 17.48	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.12.19 17.48	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.12.19 17.48	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.12.19 17.48	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.12.19 17.48	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1,4-Difluorobenzene	540-36-3	112	%	70-130	12.12.19 17.48		
4-Bromofluorobenzene	460-00-4	100	%	70-130	12.12.19 17.48		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-1 (1')  
Lab Sample Id: 646108-002

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	72.4	4.99	mg/kg	12.12.19 19.55		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-1 (2')  
Lab Sample Id: 646108-003

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	81.0	4.97	mg/kg	12.12.19 20.01		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-1 (3')  
Lab Sample Id: 646108-004

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	303	4.95	mg/kg	12.12.19 20.08		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-1 (4')  
Lab Sample Id: 646108-005

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	325	4.95	mg/kg	12.12.19 20.15		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-2 (0'-1')  
 Lab Sample Id: 646108-006

Matrix: Soil  
 Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4790	25.3	mg/kg	12.12.19 20.34		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 12.12.19 14.00

Basis: Wet Weight

Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.12.19 18.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.12.19 18.17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.12.19 18.17	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	12.12.19 18.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.12.19 18.17	
o-Terphenyl	84-15-1	107	%	70-135	12.12.19 18.17	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-2 (0'-1')  
 Lab Sample Id: 646108-006

Matrix: Soil  
 Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.12.19 18.08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.12.19 18.08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.12.19 18.08	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.12.19 18.08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.12.19 18.08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.12.19 18.08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.12.19 18.08	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1,4-Difluorobenzene	540-36-3	110	%	70-130	12.12.19 18.08		
4-Bromofluorobenzene	460-00-4	95	%	70-130	12.12.19 18.08		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-2 (1')  
Lab Sample Id: 646108-007

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7230	49.9	mg/kg	12.12.19 20.41		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-2 (2')  
Lab Sample Id: 646108-008

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3540	24.8	mg/kg	12.12.19 20.48		5



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-2 (3')  
Lab Sample Id: 646108-009

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	540	5.02	mg/kg	12.12.19 21.08		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-3 (0'-1') Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-010 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.12.19 18.00 Basis: Wet Weight  
 Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9110	50.0	mg/kg	12.12.19 20.54		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 12.12.19 14.00 Basis: Wet Weight  
 Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.12.19 18.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.12.19 18.36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.12.19 18.36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.12.19 18.36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.12.19 18.36	
o-Terphenyl	84-15-1	107	%	70-135	12.12.19 18.36	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-3 (0'-1')

Matrix: Soil

Date Received: 12.12.19 13.05

Lab Sample Id: 646108-010

Date Collected: 12.11.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.12.19 18.28	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.12.19 18.28	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.12.19 18.28	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.12.19 18.28	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.12.19 18.28	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.12.19 18.28	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.12.19 18.28	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1,4-Difluorobenzene	540-36-3	112	%	70-130	12.12.19 18.28		
4-Bromofluorobenzene	460-00-4	102	%	70-130	12.12.19 18.28		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-3 (1')  
Lab Sample Id: 646108-011

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7370	50.0	mg/kg	12.12.19 21.01		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-3 (2')  
Lab Sample Id: 646108-012

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3800	24.9	mg/kg	12.12.19 21.28		5



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-3 (3')  
Lab Sample Id: 646108-013

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1300	4.95	mg/kg	12.12.19 21.34		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-4 (0'-1')** Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-014 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.12.19 18.00 Basis: Wet Weight  
 Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>8480</b>	50.4	mg/kg	12.12.19 21.54		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 12.12.19 14.00 Basis: Wet Weight  
 Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.12.19 18.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.12.19 18.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.12.19 18.55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.12.19 18.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.12.19 18.55	
o-Terphenyl	84-15-1	107	%	70-135	12.12.19 18.55	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-4 (0'-1')  
 Lab Sample Id: 646108-014

Matrix: Soil  
 Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.12.19 18.49	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.12.19 18.49	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.12.19 18.49	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.12.19 18.49	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.12.19 18.49	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.12.19 18.49	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.12.19 18.49	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1,4-Difluorobenzene	540-36-3	114	%	70-130	12.12.19 18.49		
4-Bromofluorobenzene	460-00-4	103	%	70-130	12.12.19 18.49		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-4 (1')  
Lab Sample Id: 646108-015

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4900	25.1	mg/kg	12.12.19 22.01		5



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-4 (2')  
Lab Sample Id: 646108-016

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	521	4.99	mg/kg	12.12.19 22.08		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-4 (3')  
Lab Sample Id: 646108-017

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	793	5.00	mg/kg	12.12.19 23.14		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-5 (0'-1')** Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-018 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.12.19 18.00 Basis: Wet Weight  
 Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3400	25.2	mg/kg	12.12.19 22.14		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 12.12.19 14.00 Basis: Wet Weight  
 Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.12.19 19.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.12.19 19.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.12.19 19.14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.12.19 19.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.12.19 19.14	
o-Terphenyl	84-15-1	105	%	70-135	12.12.19 19.14	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-5 (0'-1')

Matrix: Soil

Date Received: 12.12.19 13.05

Lab Sample Id: 646108-018

Date Collected: 12.11.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.12.19 19.09	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.12.19 19.09	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.12.19 19.09	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	12.12.19 19.09	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.12.19 19.09	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.12.19 19.09	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.12.19 19.09	U	1
			%				
<b>Surrogate</b>	<b>Cas Number</b>	<b>Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1,4-Difluorobenzene	540-36-3	111	%	70-130	12.12.19 19.09		
4-Bromofluorobenzene	460-00-4	99	%	70-130	12.12.19 19.09		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-5 (1')  
Lab Sample Id: 646108-019

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2830	25.0	mg/kg	12.12.19 22.21		5



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-5 (2')  
Lab Sample Id: 646108-020

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2890	25.0	mg/kg	12.12.19 22.27		5



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-6 (0'-1')**  
 Lab Sample Id: 646108-021

Matrix: Soil  
 Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.00

Basis: Wet Weight

Seq Number: 3110412

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>8350</b>	50.0	mg/kg	12.12.19 22.34		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 12.12.19 14.00

Basis: Wet Weight

Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.12.19 19.33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.12.19 19.33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.12.19 19.33	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.12.19 19.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	12.12.19 19.33	
o-Terphenyl	84-15-1	108	%	70-135	12.12.19 19.33	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-6 (0'-1')**  
 Lab Sample Id: 646108-021

Matrix: Soil  
 Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.12.19 19.29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.12.19 19.29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.12.19 19.29	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.12.19 19.29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.12.19 19.29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.12.19 19.29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.12.19 19.29	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	102	%	70-130	12.12.19 19.29		
1,4-Difluorobenzene	540-36-3	111	%	70-130	12.12.19 19.29		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-6 (1')  
Lab Sample Id: 646108-022

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2600	24.8	mg/kg	12.12.19 23.34		5



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-6(2')  
Lab Sample Id: 646108-023

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10400	49.9	mg/kg	12.12.19 23.41		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-6(3')  
Lab Sample Id: 646108-024

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2360	25.2	mg/kg	12.12.19 23.47		5



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-7 (0'-1') Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-025 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.12.19 18.45 Basis: Wet Weight  
 Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7430	50.1	mg/kg	12.12.19 23.54		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 12.12.19 14.00 Basis: Wet Weight  
 Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.12.19 19.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.12.19 19.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.12.19 19.52	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	12.12.19 19.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	12.12.19 19.52	
o-Terphenyl	84-15-1	105	%	70-135	12.12.19 19.52	



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-7 (0'-1')  
 Lab Sample Id: 646108-025

Matrix: Soil  
 Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.12.19 19.50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.12.19 19.50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.12.19 19.50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.12.19 19.50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.12.19 19.50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.12.19 19.50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.12.19 19.50	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>		<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>
4-Bromofluorobenzene	460-00-4	110		%	70-130	12.12.19 19.50	
1,4-Difluorobenzene	540-36-3	113		%	70-130	12.12.19 19.50	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-7 (1')  
Lab Sample Id: 646108-026

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8420	49.6	mg/kg	12.13.19 00.14		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-7 (2')  
Lab Sample Id: 646108-027

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6450	50.0	mg/kg	12.13.19 00.20		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-8 (0'-1')** Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-028 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.12.19 18.45 Basis: Wet Weight  
 Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>9060</b>	49.7	mg/kg	12.13.19 00.27		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 12.12.19 14.00 Basis: Wet Weight  
 Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.12.19 20.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.12.19 20.11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.12.19 20.11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.12.19 20.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.12.19 20.11	
o-Terphenyl	84-15-1	105	%	70-135	12.12.19 20.11	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-8 (0'-1')**  
 Lab Sample Id: 646108-028

Matrix: Soil  
 Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.12.19 20.10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.12.19 20.10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.12.19 20.10	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.12.19 20.10	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.12.19 20.10	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.12.19 20.10	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.12.19 20.10	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	101	%	70-130	12.12.19 20.10		
1,4-Difluorobenzene	540-36-3	113	%	70-130	12.12.19 20.10		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-8 (1')**  
Lab Sample Id: 646108-029

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>8490</b>	50.3	mg/kg	12.13.19 00.34		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-8 (2')  
Lab Sample Id: 646108-030

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8450	50.5	mg/kg	12.13.19 00.40		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-8 (3')  
Lab Sample Id: 646108-031

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4070	24.8	mg/kg	12.13.19 01.07		5



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-9 (0'-1')** Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-032 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.12.19 18.45 Basis: Wet Weight  
 Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16000	101	mg/kg	12.13.19 01.14		20

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 12.12.19 14.00 Basis: Wet Weight  
 Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.12.19 20.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.12.19 20.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.12.19 20.30	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.12.19 20.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	12.12.19 20.30	
o-Terphenyl	84-15-1	109	%	70-135	12.12.19 20.30	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-9 (0'-1')**  
 Lab Sample Id: 646108-032

Matrix: Soil  
 Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.12.19 20.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.12.19 20.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.12.19 20.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.12.19 20.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.12.19 20.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.12.19 20.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.12.19 20.31	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>		<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>
1,4-Difluorobenzene	540-36-3	112		%	70-130	12.12.19 20.31	
4-Bromofluorobenzene	460-00-4	100		%	70-130	12.12.19 20.31	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-9 (1')  
Lab Sample Id: 646108-033

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6710	49.8	mg/kg	12.13.19 01.33		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-10 (0'-1')**

Matrix: Soil

Date Received: 12.12.19 13.05

Lab Sample Id: 646108-034

Date Collected: 12.11.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>6970</b>	50.0	mg/kg	12.13.19 01.40		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 12.12.19 14.00

Basis: Wet Weight

Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.12.19 20.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.12.19 20.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.12.19 20.49	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.12.19 20.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	12.12.19 20.49	
o-Terphenyl	84-15-1	102	%	70-135	12.12.19 20.49	



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-10 (0'-1')

Matrix: Soil

Date Received: 12.12.19 13.05

Lab Sample Id: 646108-034

Date Collected: 12.11.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.12.19 20.51	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.12.19 20.51	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.12.19 20.51	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.12.19 20.51	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.12.19 20.51	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.12.19 20.51	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.12.19 20.51	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	104	%	70-130	12.12.19 20.51		
1,4-Difluorobenzene	540-36-3	112	%	70-130	12.12.19 20.51		



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-10 (1')**  
Lab Sample Id: 646108-035

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5350	25.0	mg/kg	12.13.19 01.47		5



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-10 (2')  
Lab Sample Id: 646108-036

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	828	5.00	mg/kg	12.13.19 00.47		1



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-1 1(0'-1')

Matrix: Soil

Date Received: 12.12.19 13.05

Lab Sample Id: 646108-037

Date Collected: 12.11.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6830	50.2	mg/kg	12.13.19 01.53		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 12.12.19 14.00

Basis: Wet Weight

Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.12.19 21.08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.12.19 21.08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.12.19 21.08	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.12.19 21.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.12.19 21.08	
o-Terphenyl	84-15-1	105	%	70-135	12.12.19 21.08	



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-1 1(0'-1')

Matrix: Soil

Date Received: 12.12.19 13.05

Lab Sample Id: 646108-037

Date Collected: 12.11.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.12.19 22.30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.12.19 22.30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.12.19 22.30	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	12.12.19 22.30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.12.19 22.30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.12.19 22.30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.12.19 22.30	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	94	%	70-130	12.12.19 22.30		
1,4-Difluorobenzene	540-36-3	110	%	70-130	12.12.19 22.30		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-11 (1')  
Lab Sample Id: 646108-038

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7420	49.7	mg/kg	12.13.19 02.00		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-11 (2')  
Lab Sample Id: 646108-039

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.12.19 18.45

Basis: Wet Weight

Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6630	49.5	mg/kg	12.13.19 02.07		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX Golden Eye 18 Fed Com 1H

Sample Id: **T-11 (3')** Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-040 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.12.19 18.45 Basis: Wet Weight  
 Seq Number: 3110413

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>6470</b>	50.4	mg/kg	12.13.19 02.13		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-11 (4')  
Lab Sample Id: 646108-041

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.13.19 08.15

Basis: Wet Weight

Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8400	50.0	mg/kg	12.13.19 09.14		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-11 (5')  
Lab Sample Id: 646108-042

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.13.19 08.15

Basis: Wet Weight

Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7690	50.0	mg/kg	12.13.19 09.21		10



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-12 (0'-1')** Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-043 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.13.19 08.15 Basis: Wet Weight  
 Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.43	5.00	mg/kg	12.13.19 08.48		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 12.12.19 14.00 Basis: Wet Weight  
 Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.12.19 21.27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.12.19 21.27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.12.19 21.27	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	12.12.19 21.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	12.12.19 21.27	
o-Terphenyl	84-15-1	103	%	70-135	12.12.19 21.27	



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-12 (0'-1')

Matrix: Soil

Date Received: 12.12.19 13.05

Lab Sample Id: 646108-043

Date Collected: 12.11.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.12.19 22.51	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.12.19 22.51	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.12.19 22.51	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.12.19 22.51	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.12.19 22.51	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	12.12.19 22.51	U	1
Total BTEX		<0.00201	0.00201	mg/kg	12.12.19 22.51	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1,4-Difluorobenzene	540-36-3	107	%	70-130	12.12.19 22.51		
4-Bromofluorobenzene	460-00-4	90	%	70-130	12.12.19 22.51		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-12 (1')  
Lab Sample Id: 646108-044

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.13.19 08.15

Basis: Wet Weight

Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.7	4.99	mg/kg	12.13.19 09.28		1



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-12 (2')  
Lab Sample Id: 646108-045

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.13.19 08.15

Basis: Wet Weight

Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	702	4.95	mg/kg	12.13.19 09.48		1



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-12 (3')  
Lab Sample Id: 646108-046

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.13.19 08.15

Basis: Wet Weight

Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	734	4.98	mg/kg	12.13.19 09.54		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-12 (4')  
Lab Sample Id: 646108-047

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.13.19 08.15

Basis: Wet Weight

Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	207	4.99	mg/kg	12.13.19 11.14		1



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-12 (5')  
Lab Sample Id: 646108-048

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.13.19 08.15

Basis: Wet Weight

Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.0	5.02	mg/kg	12.13.19 11.21		1



# Certificate of Analytical Results 646108



## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: **T-13 (0'-1')** Matrix: Soil Date Received: 12.12.19 13.05  
 Lab Sample Id: 646108-049 Date Collected: 12.11.19 00.00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 12.13.19 08.15 Basis: Wet Weight  
 Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.68	5.00	mg/kg	12.13.19 11.28		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 12.12.19 14.00 Basis: Wet Weight  
 Seq Number: 3110379

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.12.19 21.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.12.19 21.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.12.19 21.46	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.12.19 21.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	34	%	70-135	12.12.19 21.46	**
o-Terphenyl	84-15-1	78	%	70-135	12.12.19 21.46	



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-13 (0'-1')

Matrix: Soil

Date Received: 12.12.19 13.05

Lab Sample Id: 646108-049

Date Collected: 12.11.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.12.19 14.30

Basis: Wet Weight

Seq Number: 3110431

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.12.19 23.11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.12.19 23.11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.12.19 23.11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.12.19 23.11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.12.19 23.11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.12.19 23.11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.12.19 23.11	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
1,4-Difluorobenzene	540-36-3	111	%	70-130	12.12.19 23.11		
4-Bromofluorobenzene	460-00-4	98	%	70-130	12.12.19 23.11		



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-13 (1')  
Lab Sample Id: 646108-050

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.13.19 08.15

Basis: Wet Weight

Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	52.3	5.00	mg/kg	12.13.19 11.34		1



# Certificate of Analytical Results 646108

## Tetra Tech- Midland, Midland, TX

Golden Eye 18 Fed Com 1H

Sample Id: T-1 3(2')  
Lab Sample Id: 646108-051

Matrix: Soil  
Date Collected: 12.11.19 00.00

Date Received: 12.12.19 13.05

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.13.19 08.15

Basis: Wet Weight

Seq Number: 3110390

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	544	4.95	mg/kg	12.13.19 11.54		1





**Tetra Tech- Midland**  
Golden Eye 18 Fed Com 1H

**Analytical Method: Chloride by EPA 300**

Seq Number: 3110412

MB Sample Id: 7692383-1-BLK

Matrix: Solid

LCS Sample Id: 7692383-1-BKS

Prep Method: E300P

Date Prep: 12.12.19

LCSD Sample Id: 7692383-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	235	94	231	92	90-110	2	20	mg/kg	12.12.19 19:21	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3110413

MB Sample Id: 7692385-1-BLK

Matrix: Solid

LCS Sample Id: 7692385-1-BKS

Prep Method: E300P

Date Prep: 12.12.19

LCSD Sample Id: 7692385-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	238	95	238	95	90-110	0	20	mg/kg	12.12.19 23:01	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3110390

MB Sample Id: 7692378-1-BLK

Matrix: Solid

LCS Sample Id: 7692378-1-BKS

Prep Method: E300P

Date Prep: 12.13.19

LCSD Sample Id: 7692378-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	270	108	255	102	90-110	6	20	mg/kg	12.13.19 08:34	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3110412

Parent Sample Id: 646108-001

Matrix: Soil

MS Sample Id: 646108-001 S

Prep Method: E300P

Date Prep: 12.12.19

MSD Sample Id: 646108-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	141	252	381	95	380	95	90-110	0	20	mg/kg	12.12.19 19:41	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3110412

Parent Sample Id: 646108-009

Matrix: Soil

MS Sample Id: 646108-009 S

Prep Method: E300P

Date Prep: 12.12.19

MSD Sample Id: 646108-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	540	251	764	89	764	89	90-110	0	20	mg/kg	12.12.19 21:14	X

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

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

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

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



**Tetra Tech- Midland**  
Golden Eye 18 Fed Com 1H

**Analytical Method: Chloride by EPA 300**

Seq Number: 3110413  
Parent Sample Id: 646108-017

Matrix: Soil  
MS Sample Id: 646108-017 S

Prep Method: E300P  
Date Prep: 12.12.19  
MSD Sample Id: 646108-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	793	250	999	82	998	82	90-110	0	20	mg/kg	12.12.19 23:21	X

**Analytical Method: Chloride by EPA 300**

Seq Number: 3110413  
Parent Sample Id: 646108-036

Matrix: Soil  
MS Sample Id: 646108-036 S

Prep Method: E300P  
Date Prep: 12.12.19  
MSD Sample Id: 646108-036 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	828	250	1030	81	1030	81	90-110	0	20	mg/kg	12.13.19 00:54	X

**Analytical Method: Chloride by EPA 300**

Seq Number: 3110390  
Parent Sample Id: 646108-043

Matrix: Soil  
MS Sample Id: 646108-043 S

Prep Method: E300P  
Date Prep: 12.13.19  
MSD Sample Id: 646108-043 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.43	249	247	96	265	103	90-110	7	20	mg/kg	12.13.19 08:54	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3110390  
Parent Sample Id: 646108-050

Matrix: Soil  
MS Sample Id: 646108-050 S

Prep Method: E300P  
Date Prep: 12.13.19  
MSD Sample Id: 646108-050 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	52.3	250	333	112	331	111	90-110	1	20	mg/kg	12.13.19 11:41	X

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3110379  
MB Sample Id: 7692317-1-BLK

Matrix: Solid  
LCS Sample Id: 7692317-1-BKS

Prep Method: SW8015P  
Date Prep: 12.12.19  
LCSD Sample Id: 7692317-1-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	1060	106	1070	107	70-135	1	20	mg/kg	12.12.19 16:43	
Diesel Range Organics (DRO)	<15.0	1000	1070	107	1080	108	70-135	1	20	mg/kg	12.12.19 16:43	

**Surrogate**

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		124		121		70-135	%	12.12.19 16:43
o-Terphenyl	105		114		111		70-135	%	12.12.19 16:43

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

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

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

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



**Tetra Tech- Midland**  
Golden Eye 18 Fed Com 1H

**Analytical Method:** TPH by SW8015 Mod  
**Seq Number:** 3110379

**Matrix:** Solid  
**MB Sample Id:** 7692317-1-BLK

**Prep Method:** SW8015P  
**Date Prep:** 12.12.19

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.12.19 16:24	

**Analytical Method:** TPH by SW8015 Mod  
**Seq Number:** 3110379  
**Parent Sample Id:** 646108-001

**Matrix:** Soil  
**MS Sample Id:** 646108-001 S

**Prep Method:** SW8015P  
**Date Prep:** 12.12.19  
**MSD Sample Id:** 646108-001 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	997	1130	113	1130	113	70-135	0	20	mg/kg	12.12.19 17:39	
Diesel Range Organics (DRO)	<15.0	997	1130	113	1140	114	70-135	1	20	mg/kg	12.12.19 17:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		127		70-135	%	12.12.19 17:39
o-Terphenyl	119		116		70-135	%	12.12.19 17:39

**Analytical Method:** BTEX by EPA 8021B  
**Seq Number:** 3110431  
**MB Sample Id:** 7692309-1-BLK

**Matrix:** Solid  
**LCS Sample Id:** 7692309-1-BKS

**Prep Method:** SW5030B  
**Date Prep:** 12.12.19  
**LCSD Sample Id:** 7692309-1-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	0.124	124	0.118	118	70-130	5	35	mg/kg	12.12.19 15:07	
Toluene	<0.00200	0.100	0.113	113	0.109	109	70-130	4	35	mg/kg	12.12.19 15:07	
Ethylbenzene	<0.00200	0.100	0.113	113	0.110	110	70-130	3	35	mg/kg	12.12.19 15:07	
m,p-Xylenes	<0.00400	0.200	0.232	116	0.224	112	70-130	4	35	mg/kg	12.12.19 15:07	
o-Xylene	<0.00200	0.100	0.114	114	0.110	110	70-130	4	35	mg/kg	12.12.19 15:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		112		111		70-130	%	12.12.19 15:07
4-Bromofluorobenzene	94		100		99		70-130	%	12.12.19 15:07

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

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

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

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



**Tetra Tech- Midland**  
Golden Eye 18 Fed Com 1H

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

Seq Number: 3110431

Parent Sample Id: 646108-001

Matrix: Soil

MS Sample Id: 646108-001 S

Prep Method: SW5030B

Date Prep: 12.12.19

MSD Sample Id: 646108-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD	Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.112	112	0.0976	98	70-130	14	35		mg/kg	12.12.19 16:17	
Toluene	<0.00199	0.0996	0.105	105	0.0900	90	70-130	15	35		mg/kg	12.12.19 16:17	
Ethylbenzene	<0.00199	0.0996	0.105	105	0.0889	89	70-130	17	35		mg/kg	12.12.19 16:17	
m,p-Xylenes	<0.00398	0.199	0.215	108	0.180	90	70-130	18	35		mg/kg	12.12.19 16:17	
o-Xylene	<0.00199	0.0996	0.106	106	0.0891	89	70-130	17	35		mg/kg	12.12.19 16:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	113		110		70-130	%	12.12.19 16:17
4-Bromofluorobenzene	111		102		70-130	%	12.12.19 16:17

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

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

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

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

Analysis Request of Custody Record



Tetra Tech, Inc.

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

0410108

Page 1 of 6

Client Name: Concho Site Manager: Mike Carmona

Project Name: Golden Eye 18 Fed Com 1H Project #: 212C-MD-01970

Project Location: Lea County, New Mexico Invoice to: Ike Tavarez

Receiving Laboratory: Xenco Sampler Signature: Brittany Long

Comments: Run deeper samples if TPH (GRO + DRO + MRO) exceeds 2,500 mg/kg or (GRO + DRO) exceeds 1,000 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg.

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX				PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)
	YEAR	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE						
		T-1 (0-1')	12/11/2019			X			X				1	N
		T-1 (1')	12/11/2019			X			X				1	N
		T-1 (2')	12/11/2019			X			X				1	N
		T-1 (3')	12/11/2019			X			X				1	N
		T-1 (4')	12/11/2019			X			X				1	N
		T-2 (0-1')	12/11/2019			X			X				1	N
		T-2 (1')	12/11/2019			X			X				1	N
		T-2 (2')	12/11/2019			X			X				1	N
		T-2 (3')	12/11/2019			X			X				1	N
		T-3 (0-1')	12/11/2019			X			X				1	N

Relinquished by: [Signature] Date: 12.12.19 Time: 13:05  
 Relinquished by: [Signature] Date: 12/11/19 Time: 1305  
 Relinquished by: [Signature] Date: [ ] Time: [ ]  
 Relinquished by: [Signature] Date: [ ] Time: [ ]

ANALYSIS REQUEST (Circle or Specify Method No.)

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

LAB USE ONLY  
 Sample Temperature: 23  
 REMARKS:  
 RUSH: Same Day 24 hr 48 hr 72 hr  
 Rush Charges Authorized  
 Special Report Limits or TRRP Report

ORIGINAL COPY

Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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

*Handwritten signature*  
Page 2 of 6

Client Name: **Concho** Site Manager: **Mike Carmona**

Project Name: **Golden Eye 18 Fed Com 1H**

Project Location: **Lea County, New Mexico** Project #: **212C-MD-01970**

Invoice to: **Ike Tavarez**

Receiving Laboratory: **Xenco** Sampler Signature: **Brittany Long**

Comments: **Run deeper samples if TPH (GRO + DRO + MRO) exceeds 2,500 mg/kg or (GRO + DRO) exceeds 1,000 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg.**

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)
		DATE	TIME		WATER	SOIL	HCL		
	T-3 (1)	12/11/2019		X				X	
	T-3 (2)	12/11/2019		X				X	
	T-3 (3)	12/11/2019		X				X	
	T-4 (0-1)	12/11/2019		X				X	
	T-4 (1)	12/11/2019		X				X	
	T-4 (2)	12/11/2019		X				X	
	T-4 (3)	12/11/2019		X				X	
	T-5 (0-1)	12/11/2019		X				X	
	T-5 (1)	12/11/2019		X				X	
	T-5 (2)	12/11/2019		X				X	

Relinquished by: *[Signature]* Date: **12/12/19** Time: **13:05** Received by: *[Signature]* Date: **12/11/19** Time: **13:05**

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

LAB USE ONLY  
Sample Temperature: **3.3**

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

ANALYSIS REQUEST (Circle or Specify Method No.)

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

ORIGINAL COPY

Analysis Request of Custody Record



**Tetra Tech, Inc.**

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

*Handwritten signature*

**Client Name:** Concho  
**Site Manager:** Mike Carmona  
**Project Name:** Golden Eye 18 Fed Com 1H  
**Project #:** 212C-MD-01970  
**Project Location:** Lea County, New Mexico  
**Invoice to:** Ike Tavaraz  
**Receiving Laboratory:** Xenco  
**Sampler Signature:** Brittany Long  
**Comments:** Run deeper samples if TPH (GRO + DRO + MRO) exceeds 2,500 mg/kg or (GRO + DRO) exceeds 1,000 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg.

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX				# CONTAINERS	FILTERED (Y/N)	
	DATE	TIME	YEAR	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>			ICE
	T-6 (0-1')		12/11/2019			X				1	N
	T-6 (1')		12/11/2019			X				1	N
	T-6 (2)		12/11/2019			X				1	N
	T-6 (3)		12/11/2019			X				1	N
	T-7 (0-1')		12/11/2019			X				1	N
	T-7 (1')		12/11/2019			X				1	N
	T-7 (2)		12/11/2019			X				1	N
	T-8 (0-1')		12/11/2019			X				1	N
	T-8 (1')		12/11/2019			X				1	N
	T-8 (2')		12/11/2019			X				1	N

**illiquished by:** [Signature] Date: 12.12.19 Time: 13:05  
**Received by:** [Signature] Date: 12/12/19 Time: 13:05

**ANALYSIS REQUEST**  
 (Circle or Specify Method No.)

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

**LAB USE ONLY**  
 Sample Temperature: 3.3  
**REMARKS:**  
 RUSH: Same Day 24 hr 48 hr 72 hr  
 Rush Charges Authorized  
 Special Report Limits or TRRP Report

ORIGINAL COPY

Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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

10410108

Page 4 of 6

Client Name: Concho Site Manager: Mike Carmona

Project Name: Golden Eye 18 Fed Com 1H

Project Location: Lea County, New Mexico Project #: 212C-MD-01970

Invoice to: Ike Tavarez

Receiving Laboratory: Xenco Sampler Signature: Brittany Long

Comments: Run deeper samples if TPH (GRO + DRO + MRO) exceeds 2,500 mg/kg or (GRO + DRO) exceeds 1,000 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg.

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX			PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)
	YEAR	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE				
	T-8 (3)	12/11/2019		X				X		1	N	
	T-9 (0-1')	12/11/2019		X				X		1	N	
	T-9 (1')	12/11/2019		X				X		1	N	
	T-10 (0-1')	12/11/2019		X				X		1	N	
	T-10 (1')	12/11/2019		X				X		1	N	
	T-10 (2)	12/11/2019		X				X		1	N	
	T-11 (0-1')	12/11/2019		X				X		1	N	
	T-11 (1')	12/11/2019		X				X		1	N	
	T-11 (2)	12/11/2019		X				X		1	N	
	T-11 (3)	12/11/2019		X				X		1	N	

Relinquished by: [Signature] Date: 12/12/19 Time: 13:05  
Received by: [Signature] Date: 12/12/19 Time: 13:05

Relinquished by: [Signature] Date: [ ] Time: [ ]  
Received by: [Signature] Date: [ ] Time: [ ]

Relinquished by: [Signature] Date: [ ] Time: [ ]  
Received by: [Signature] Date: [ ] Time: [ ]

ANALYSIS REQUEST  
(Circle or Specify Method No.)

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

LAB USE ONLY  
Sample Temperature: 3.5

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

ORIGINAL COPY

Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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

10110108 Page 5 of 6

Client Name:

Concho

Site Manager:

Mike Carmona

Project Name:

Golden Eye 18 Fed Com 1H

Project Location:

Lea County, New Mexico

Project #:

212C-MD-01970

Invoice to:

Ike Tavaréz

Receiving Laboratory:

Xenoco

Sampler Signature:

Brittany Long

Comments:

Run deeper samples if TPH (GRO + DRO + MRO) exceeds 2,500 mg/kg or (GRO + DRO) exceeds 1,000 mg/kg.  
Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg.

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX				PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)
		YEAR	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE			
	T-11 (4)		12/11/2019		X				X		1	N
	T-11 (5)		12/11/2019		X				X		1	N
	T-12 (0-1)		12/11/2019		X				X		1	N
	T-12 (1)		12/11/2019		X				X		1	N
	T-12 (2)		12/11/2019		X				X		1	N
	T-12 (3)		12/11/2019		X				X		1	N
	T-12 (4)		12/11/2019		X				X		1	N
	T-12 (5)		12/11/2019		X				X		1	N
	T-13 (0-1)		12/11/2019		X				X		1	N
	T-13 (1)		12/11/2019		X				X		1	N

Relinquished by: *M. Carmona* Date: 12.12.19 Time: 13:05  
 Relinquished by: *M. Carmona* Date: 12.12.19 Time: 13:05  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: *M. Carmona* Date: 12/11/2019 Time: 13:05  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

**ANALYSIS REQUEST**  
(Circle or Specify Method No.)

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

LAB USE ONLY  
 Sample Temperature: *3.3*

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

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

Client Name: Concho Site Manager: Mike Carmona

Project Name: Golden Eye 18 Fed Com 1H Project #: 212C-MD-01970

Project Location: Lea County, New Mexico

Invoice to: Ike Tavaréz

Receiving Laboratory: Xenco Sampler Signature: Brittany Long

Comments: Run deeper samples if TPH (GRO + DRO + MRO) exceeds 2,500 mg/kg or (GRO + DRO) exceeds 1,000 mg/kg. Run deeper samples if benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg.

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX				PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		YEAR	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE		
	T-13 (2)		12/11/2019		X				X	1	N

LAB USE ONLY	REMARKS:
<input checked="" type="checkbox"/> RUSH: Same Day 24 hr <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report	BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) <input checked="" type="checkbox"/> Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance Hold

illiquished by: *KBH* Date: 12.12.19 Time: 13:05 Received by: *BTJ* Date: 12/12/19 Time: 13:05

illiquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

ORIGINAL COPY

*10/16/20* Page 6 of 6



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

Client: Tetra Tech- Midland

Date/ Time Received: 12/12/2019 01:05:00 PM

Work Order #: 646108

Acceptable Temperature Range: 0 - 6 degC  
Air and Metal samples Acceptable Range: Ambient  
Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.3
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6*Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 12/12/2019  
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 12/13/2019  
Jessica Kramer



# Certificate of Analysis Summary 672316

Tetra Tech- Midland, Midland, TX

Project Name: COG-Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Fri 09.11.2020 11:43  
**Report Date:** 09.25.2020 08:40  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672316-001	672316-002	672316-003	672316-004	672316-005	672316-006
	<i>Field Id:</i>	Bottom Hole-1 (3')	Bottom Hole-2 (3')	Bottom Hole-3 (3')	SW-1 (3')	SW-2 (3')	SW-3 (3')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.04.2020 00:00	09.04.2020 00:00	09.04.2020 00:00	09.04.2020 00:00	09.04.2020 00:00	09.04.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.11.2020 17:00	09.11.2020 17:00	09.11.2020 12:00	09.11.2020 17:00	09.11.2020 17:00	09.11.2020 17:00
	<i>Analyzed:</i>	09.12.2020 03:10	09.12.2020 03:30	09.11.2020 15:05	09.12.2020 03:51	09.12.2020 04:12	09.12.2020 04:32
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Toluene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Ethylbenzene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
m,p-Xylenes		<0.00403 0.00403	<0.00398 0.00398	<0.00399 0.00399	<0.00401 0.00401	<0.00402 0.00402	<0.00398 0.00398
o-Xylene		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Total Xylenes		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Total BTEX		<0.00202 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.11.2020 17:45	09.11.2020 17:45	09.11.2020 17:45	09.11.2020 17:45	09.11.2020 17:45	09.11.2020 17:45
	<i>Analyzed:</i>	09.11.2020 18:44	09.11.2020 19:00	09.11.2020 19:05	09.11.2020 19:10	09.11.2020 19:15	09.11.2020 19:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		75.3 4.97	90.7 5.04	84.1 5.02	79.3 5.00	79.6 5.05	75.4 5.02
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.11.2020 15:56	09.11.2020 15:56	09.11.2020 15:56	09.11.2020 15:56	09.11.2020 15:56	09.11.2020 15:56
	<i>Analyzed:</i>	09.12.2020 01:03	09.12.2020 02:00	09.12.2020 02:19	09.12.2020 02:38	09.12.2020 02:57	09.12.2020 03:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

*Jessica Kramer*

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



# Certificate of Analysis Summary 672316

Tetra Tech- Midland, Midland, TX

Project Name: COG-Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Fri 09.11.2020 11:43  
**Report Date:** 09.25.2020 08:40  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672316-007	672316-008	672316-009			
	<i>Field Id:</i>	SW-4 (3')	SW-5 (3')	SW-6 (3')			
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	09.04.2020 00:00	09.04.2020 00:00	09.04.2020 00:00			
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.11.2020 17:00	09.11.2020 17:00	09.11.2020 17:00			
	<i>Analyzed:</i>	09.12.2020 04:53	09.12.2020 05:14	09.12.2020 05:34			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
m,p-Xylenes		<0.00400 0.00400	<0.00399 0.00399	<0.00399 0.00399			
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200			
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.11.2020 17:45	09.11.2020 17:45	09.11.2020 17:45			
	<i>Analyzed:</i>	09.11.2020 19:37	09.11.2020 19:42	09.11.2020 19:47			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		76.8 4.98	83.2 4.97	77.4 4.95			
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.11.2020 15:56	09.11.2020 15:56	09.11.2020 15:56			
	<i>Analyzed:</i>	09.12.2020 03:35	09.12.2020 03:54	09.12.2020 04:14			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0			
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0			
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0			
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0			

BRL - Below Reporting Limit

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

*Jessica Kramer*

# Analytical Report 672316

for

## Tetra Tech- Midland

Project Manager: Mike Carmona

COG-Goldeneye 18 Federal Com #1H (10.15.19)

212C-MD-02306

09.25.2020

Collected By: Client



1211 W. Florida Ave  
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)  
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

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

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



09.25.2020

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **672316**  
**COG-Goldeneye 18 Federal Com #1H (10.15.19)**  
Project Address: Eddy County, New Mexico

**Mike Carmona:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 672316. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 672316 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

**Jessica Kramer**

Project Manager

*A Small Business and Minority Company*

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



# Sample Cross Reference 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottom Hole-1 (3')	S	09.04.2020 00:00		672316-001
Bottom Hole-2 (3')	S	09.04.2020 00:00		672316-002
Bottom Hole-3 (3')	S	09.04.2020 00:00		672316-003
SW-1 (3')	S	09.04.2020 00:00		672316-004
SW-2 (3')	S	09.04.2020 00:00		672316-005
SW-3 (3')	S	09.04.2020 00:00		672316-006
SW-4 (3')	S	09.04.2020 00:00		672316-007
SW-5 (3')	S	09.04.2020 00:00		672316-008
SW-6 (3')	S	09.04.2020 00:00		672316-009



## CASE NARRATIVE

**Client Name: Tetra Tech- Midland**

**Project Name: COG-Goldeneye 18 Federal Com #1H (10.15.19)**

Project ID: 212C-MD-02306  
Work Order Number(s): 672316

Report Date: 09.25.2020  
Date Received: 09.11.2020

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**Sample receipt non conformances and comments:**

V1.001 Revision - Corrected sample ID typo

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**Sample receipt non conformances and comments per sample:**

None



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-1 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-001 Date Collected: 09.04.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: SPC % Moisture:  
 Analyst: SPC Date Prep: 09.11.2020 17:45 Basis: Wet Weight  
 Seq Number: 3136988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	75.3	4.97	mg/kg	09.11.2020 18:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.11.2020 15:56 Basis: Wet Weight  
 Seq Number: 3137013

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.12.2020 01:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.12.2020 01:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.12.2020 01:03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.12.2020 01:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	09.12.2020 01:03	
o-Terphenyl	84-15-1	116	%	70-130	09.12.2020 01:03	



# Certificate of Analytical Results 672316

**Tetra Tech- Midland, Midland, TX**  
 COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-1 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-001 Date Collected: 09.04.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.11.2020 17:00 Basis: Wet Weight  
 Seq Number: 3136969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.12.2020 03:10	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.12.2020 03:10	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.12.2020 03:10	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.12.2020 03:10	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.12.2020 03:10	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.12.2020 03:10	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.12.2020 03:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.12.2020 03:10	
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.12.2020 03:10	



# Certificate of Analytical Results 672316

**Tetra Tech- Midland, Midland, TX**  
 COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-2 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-002 Date Collected: 09.04.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: SPC % Moisture:  
 Analyst: SPC Date Prep: 09.11.2020 17:45 Basis: Wet Weight  
 Seq Number: 3136988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	90.7	5.04	mg/kg	09.11.2020 19:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.11.2020 15:56 Basis: Wet Weight  
 Seq Number: 3137013

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.12.2020 02:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.12.2020 02:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.12.2020 02:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.12.2020 02:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-130	09.12.2020 02:00	
o-Terphenyl	84-15-1	97	%	70-130	09.12.2020 02:00	



# Certificate of Analytical Results 672316

**Tetra Tech- Midland, Midland, TX**  
 COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-2 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-002 Date Collected: 09.04.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.11.2020 17:00 Basis: Wet Weight  
 Seq Number: 3136969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.12.2020 03:30	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.12.2020 03:30	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.12.2020 03:30	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.12.2020 03:30	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.12.2020 03:30	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.12.2020 03:30	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.12.2020 03:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	09.12.2020 03:30	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.12.2020 03:30	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-3 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-003 Date Collected: 09.04.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: SPC % Moisture:  
 Analyst: SPC Date Prep: 09.11.2020 17:45 Basis: Wet Weight  
 Seq Number: 3136988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	84.1	5.02	mg/kg	09.11.2020 19:05		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.11.2020 15:56 Basis: Wet Weight  
 Seq Number: 3137013

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.12.2020 02:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.12.2020 02:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.12.2020 02:19	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.12.2020 02:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	09.12.2020 02:19	
o-Terphenyl	84-15-1	100	%	70-130	09.12.2020 02:19	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-3 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-003 Date Collected: 09.04.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.11.2020 12:00 Basis: Wet Weight  
 Seq Number: 3136970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.11.2020 15:05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.11.2020 15:05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.11.2020 15:05	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.11.2020 15:05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.11.2020 15:05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.11.2020 15:05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.11.2020 15:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	81	%	70-130	09.11.2020 15:05	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.11.2020 15:05	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-1 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-004 Date Collected: 09.04.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: SPC % Moisture:  
 Analyst: SPC Date Prep: 09.11.2020 17:45 Basis: Wet Weight  
 Seq Number: 3136988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<b>79.3</b>	5.00	mg/kg	09.11.2020 19:10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.11.2020 15:56 Basis: Wet Weight  
 Seq Number: 3137013

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.12.2020 02:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.12.2020 02:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.12.2020 02:38	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.12.2020 02:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	09.12.2020 02:38	
o-Terphenyl	84-15-1	97	%	70-130	09.12.2020 02:38	



# Certificate of Analytical Results 672316

**Tetra Tech- Midland, Midland, TX**  
 COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-1 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-004 Date Collected: 09.04.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.11.2020 17:00 Basis: Wet Weight  
 Seq Number: 3136969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.12.2020 03:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.12.2020 03:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.12.2020 03:51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.12.2020 03:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.12.2020 03:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.12.2020 03:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.12.2020 03:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	09.12.2020 03:51	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.12.2020 03:51	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-2 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-005 Date Collected: 09.04.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: SPC % Moisture:  
 Analyst: SPC Date Prep: 09.11.2020 17:45 Basis: Wet Weight  
 Seq Number: 3136988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	79.6	5.05	mg/kg	09.11.2020 19:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.11.2020 15:56 Basis: Wet Weight  
 Seq Number: 3137013

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.12.2020 02:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.12.2020 02:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.12.2020 02:57	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.12.2020 02:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	09.12.2020 02:57	
o-Terphenyl	84-15-1	101	%	70-130	09.12.2020 02:57	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-2 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-005 Date Collected: 09.04.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.11.2020 17:00 Basis: Wet Weight  
 Seq Number: 3136969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.12.2020 04:12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.12.2020 04:12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.12.2020 04:12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.12.2020 04:12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.12.2020 04:12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.12.2020 04:12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.12.2020 04:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	09.12.2020 04:12	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.12.2020 04:12	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-3 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-006 Date Collected: 09.04.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: SPC % Moisture:  
 Analyst: SPC Date Prep: 09.11.2020 17:45 Basis: Wet Weight  
 Seq Number: 3136988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	75.4	5.02	mg/kg	09.11.2020 19:31		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.11.2020 15:56 Basis: Wet Weight  
 Seq Number: 3137013

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.12.2020 03:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.12.2020 03:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.12.2020 03:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.12.2020 03:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	09.12.2020 03:16	
o-Terphenyl	84-15-1	94	%	70-130	09.12.2020 03:16	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-3 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-006 Date Collected: 09.04.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.11.2020 17:00 Basis: Wet Weight  
 Seq Number: 3136969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.12.2020 04:32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.12.2020 04:32	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.12.2020 04:32	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.12.2020 04:32	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.12.2020 04:32	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.12.2020 04:32	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.12.2020 04:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	09.12.2020 04:32	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.12.2020 04:32	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-4 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-007 Date Collected: 09.04.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: SPC % Moisture:  
 Analyst: SPC Date Prep: 09.11.2020 17:45 Basis: Wet Weight  
 Seq Number: 3136988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	76.8	4.98	mg/kg	09.11.2020 19:37		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.11.2020 15:56 Basis: Wet Weight  
 Seq Number: 3137013

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.12.2020 03:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.12.2020 03:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.12.2020 03:35	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.12.2020 03:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	09.12.2020 03:35	
o-Terphenyl	84-15-1	97	%	70-130	09.12.2020 03:35	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-4 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-007 Date Collected: 09.04.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.11.2020 17:00 Basis: Wet Weight  
 Seq Number: 3136969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.12.2020 04:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.12.2020 04:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.12.2020 04:53	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.12.2020 04:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.12.2020 04:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.12.2020 04:53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.12.2020 04:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.12.2020 04:53	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.12.2020 04:53	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-5 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-008 Date Collected: 09.04.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: SPC % Moisture:  
 Analyst: SPC Date Prep: 09.11.2020 17:45 Basis: Wet Weight  
 Seq Number: 3136988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	83.2	4.97	mg/kg	09.11.2020 19:42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.11.2020 15:56 Basis: Wet Weight  
 Seq Number: 3137013

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.12.2020 03:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.12.2020 03:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.12.2020 03:54	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.12.2020 03:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	09.12.2020 03:54	
o-Terphenyl	84-15-1	94	%	70-130	09.12.2020 03:54	



# Certificate of Analytical Results 672316

**Tetra Tech- Midland, Midland, TX**  
 COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-5 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-008 Date Collected: 09.04.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.11.2020 17:00 Basis: Wet Weight  
 Seq Number: 3136969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.12.2020 05:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.12.2020 05:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.12.2020 05:14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.12.2020 05:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.12.2020 05:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.12.2020 05:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.12.2020 05:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	09.12.2020 05:14	
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.12.2020 05:14	



# Certificate of Analytical Results 672316

**Tetra Tech- Midland, Midland, TX**  
 COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-6 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-009 Date Collected: 09.04.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: SPC % Moisture:  
 Analyst: SPC Date Prep: 09.11.2020 17:45 Basis: Wet Weight  
 Seq Number: 3136988

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	77.4	4.95	mg/kg	09.11.2020 19:47		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.11.2020 15:56 Basis: Wet Weight  
 Seq Number: 3137013

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.12.2020 04:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.12.2020 04:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.12.2020 04:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.12.2020 04:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	09.12.2020 04:14	
o-Terphenyl	84-15-1	96	%	70-130	09.12.2020 04:14	



# Certificate of Analytical Results 672316

## Tetra Tech- Midland, Midland, TX

COG-Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-6 (3')** Matrix: Soil Date Received: 09.11.2020 11:43  
 Lab Sample Id: 672316-009 Date Collected: 09.04.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.11.2020 17:00 Basis: Wet Weight  
 Seq Number: 3136969

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.12.2020 05:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.12.2020 05:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.12.2020 05:34	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.12.2020 05:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.12.2020 05:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.12.2020 05:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.12.2020 05:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	09.12.2020 05:34	
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.12.2020 05:34	





**Tetra Tech- Midland**

COG-Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: Chloride by EPA 300**

Seq Number: 3136988

MB Sample Id: 7711204-1-BLK

Matrix: Solid

LCS Sample Id: 7711204-1-BKS

Prep Method: E300P

Date Prep: 09.11.2020

LCSD Sample Id: 7711204-1-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	265	106	264	106	90-110	0	20	mg/kg	09.11.2020 18:33	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3136988

Parent Sample Id: 672184-002

Matrix: Soil

MS Sample Id: 672184-002 S

Prep Method: E300P

Date Prep: 09.11.2020

MSD Sample Id: 672184-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.4	248	281	109	282	110	90-110	0	20	mg/kg	09.11.2020 20:03	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3136988

Parent Sample Id: 672316-001

Matrix: Soil

MS Sample Id: 672316-001 S

Prep Method: E300P

Date Prep: 09.11.2020

MSD Sample Id: 672316-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	75.3	249	338	106	337	105	90-110	0	20	mg/kg	09.11.2020 18:49	

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137013

MB Sample Id: 7711181-1-BLK

Matrix: Solid

LCS Sample Id: 7711181-1-BKS

Prep Method: SW8015P

Date Prep: 09.11.2020

LCSD Sample Id: 7711181-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	982	98	957	96	70-130	3	20	mg/kg	09.12.2020 00:25	
Diesel Range Organics (DRO)	<50.0	1000	997	100	970	97	70-130	3	20	mg/kg	09.12.2020 00:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		100		89		70-130	%	09.12.2020 00:25
o-Terphenyl	102		101		97		70-130	%	09.12.2020 00:25

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137013

Matrix: Solid

MB Sample Id: 7711181-1-BLK

Prep Method: SW8015P

Date Prep: 09.11.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.12.2020 00:06	

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

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

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

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



**Tetra Tech- Midland**

COG-Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137013  
Parent Sample Id: 672316-001

Matrix: Soil  
MS Sample Id: 672316-001 S

Prep Method: SW8015P  
Date Prep: 09.11.2020  
MSD Sample Id: 672316-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	1060	106	936	94	70-130	12	20	mg/kg	09.12.2020 01:22	
Diesel Range Organics (DRO)	<49.9	997	1060	106	936	94	70-130	12	20	mg/kg	09.12.2020 01:22	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		100		70-130	%	09.12.2020 01:22
o-Terphenyl	123		105		70-130	%	09.12.2020 01:22

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

Seq Number: 3136970  
MB Sample Id: 7711208-1-BLK

Matrix: Solid  
LCS Sample Id: 7711208-1-BKS

Prep Method: SW5035A  
Date Prep: 09.11.2020  
LCSD Sample Id: 7711208-1-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	0.103	103	0.119	119	70-130	14	35	mg/kg	09.11.2020 12:44	
Toluene	<0.00200	0.100	0.0969	97	0.113	113	70-130	15	35	mg/kg	09.11.2020 12:44	
Ethylbenzene	<0.00200	0.100	0.104	104	0.123	123	70-130	17	35	mg/kg	09.11.2020 12:44	
m,p-Xylenes	<0.00400	0.200	0.217	109	0.258	129	70-130	17	35	mg/kg	09.11.2020 12:44	
o-Xylene	<0.00200	0.100	0.103	103	0.124	124	70-130	19	35	mg/kg	09.11.2020 12:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		98		103		70-130	%	09.11.2020 12:44
4-Bromofluorobenzene	79		109		128		70-130	%	09.11.2020 12:44

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

Seq Number: 3136969  
MB Sample Id: 7711207-1-BLK

Matrix: Solid  
LCS Sample Id: 7711207-1-BKS

Prep Method: SW5035A  
Date Prep: 09.11.2020  
LCSD Sample Id: 7711207-1-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	0.115	115	0.115	115	70-130	0	35	mg/kg	09.11.2020 19:52	
Toluene	<0.00200	0.100	0.113	113	0.113	113	70-130	0	35	mg/kg	09.11.2020 19:52	
Ethylbenzene	<0.00200	0.100	0.104	104	0.104	104	70-130	0	35	mg/kg	09.11.2020 19:52	
m,p-Xylenes	<0.00400	0.200	0.205	103	0.204	102	70-130	0	35	mg/kg	09.11.2020 19:52	
o-Xylene	<0.00200	0.100	0.104	104	0.103	103	70-130	1	35	mg/kg	09.11.2020 19:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		105		106		70-130	%	09.11.2020 19:52
4-Bromofluorobenzene	88		101		98		70-130	%	09.11.2020 19:52

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

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

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

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



**Tetra Tech- Midland**  
COG-Goldeneye 18 Federal Com #1H (10.15.19)

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

Seq Number: 3136970

Parent Sample Id: 672316-003

Matrix: Soil

MS Sample Id: 672316-003 S

Prep Method: SW5035A

Date Prep: 09.11.2020

MSD Sample Id: 672316-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.106	105	70-130	2	35	mg/kg	09.11.2020 13:25	
Toluene	<0.00200	0.100	0.0998	100	0.102	101	70-130	2	35	mg/kg	09.11.2020 13:25	
Ethylbenzene	<0.00200	0.100	0.109	109	0.112	111	70-130	3	35	mg/kg	09.11.2020 13:25	
m,p-Xylenes	<0.00400	0.200	0.232	116	0.236	117	70-130	2	35	mg/kg	09.11.2020 13:25	
o-Xylene	<0.00200	0.100	0.111	111	0.113	112	70-130	2	35	mg/kg	09.11.2020 13:25	

**Surrogate**

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		70-130	%	09.11.2020 13:25
4-Bromofluorobenzene	129		128		70-130	%	09.11.2020 13:25

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

Seq Number: 3136969

Parent Sample Id: 672184-002

Matrix: Soil

MS Sample Id: 672184-002 S

Prep Method: SW5035A

Date Prep: 09.11.2020

MSD Sample Id: 672184-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00455	0.0992	0.105	101	0.104	100	70-130	1	35	mg/kg	09.11.2020 20:34	
Toluene	0.0291	0.0992	0.102	73	0.103	74	70-130	1	35	mg/kg	09.11.2020 20:34	
Ethylbenzene	0.00877	0.0992	0.0931	85	0.0921	84	70-130	1	35	mg/kg	09.11.2020 20:34	
m,p-Xylenes	0.00788	0.198	0.183	88	0.181	87	70-130	1	35	mg/kg	09.11.2020 20:34	
o-Xylene	0.00280	0.0992	0.0926	91	0.0916	89	70-130	1	35	mg/kg	09.11.2020 20:34	

**Surrogate**

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		102		70-130	%	09.11.2020 20:34
4-Bromofluorobenzene	102		101		70-130	%	09.11.2020 20:34

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

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

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

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

Analysis Request of Custody Record



**Tetra Tech, Inc.**

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

072310

Client Name: COG

Site Manager: Mike Carmona

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

Project Location: Eddy County, New Mexico

Project #:

212C-MD-02306

Invoice to: Ike Tavarez

Receiving Laboratory: Xenoco Labs

Sampler Signature: Devin D

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE		
	Bottom Hole-1 (3')	9/4/2020		X					1	X
	Bottom Hole-2 (3')	9/4/2020		X					1	X
	Bottom Hole-3 (3')	9/4/2020		X					1	X
	SW-1 (3')	9/4/2020		X					1	X
	SW-2 (3')	9/4/2020		X					1	X
	SW-3 (3')	9/4/2020		X					1	X
	SW-4 (3')	9/4/2020		X					1	X
	SW-5 (3')	9/4/2020		X					1	X
	SW-6 (3')	9/4/2020		X					1	X

Relinquished by: *Mike Carmona* Date: 9/11/2020 Time: 1143

Received by: *[Signature]* Date: 9/11/2020 Time: 1143

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

**LAB USE ONLY**

Sample Temperature: 5.0/5.2

REMARKS:

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

(Circle) HAND DELIVERED P/DEX UPS Tracking #:

**ANALYSIS REQUEST**  
(Circle or Specify Method No.)

BTEX 8021B

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 300.0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

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# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 09.11.2020 11.43.00 AM

Work Order #: 672316

Acceptable Temperature Range: 0 - 6 degC  
Air and Metal samples Acceptable Range: Ambient  
Temperature Measuring device used : IR-8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	5.2	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6*Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	BTEX was in bulk container
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	N/A	
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 09.11.2020  
 Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 09.11.2020  
 Jessica Kramer



# Certificate of Analysis Summary 672801

Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Thu 09.17.2020 11:32  
**Report Date:** 09.21.2020 12:01  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672801-001	672801-002	672801-003	672801-004	672801-005	672801-006
	<i>Field Id:</i>	Bottom Hole-4 (3.5')	Bottom Hole-5 (3.5')	Bottom Hole-6 (3.5')	Bottom Hole-7 (3.5')	Bottom Hole-8 (3.5')	Bottom Hole-9 (6")
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45
	<i>Analyzed:</i>	09.17.2020 15:58	09.17.2020 16:19	09.17.2020 16:39	09.17.2020 17:00	09.17.2020 17:20	09.17.2020 17:41
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00397 0.00397	<0.00400 0.00400	<0.00399 0.00399	<0.00396 0.00396	<0.00400 0.00400	<0.00402 0.00402
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.17.2020 16:50	09.17.2020 16:50	09.17.2020 16:50	09.17.2020 16:50	09.17.2020 16:50	09.17.2020 16:50
	<i>Analyzed:</i>	09.17.2020 23:52	09.17.2020 23:57	09.18.2020 00:03	09.18.2020 00:08	09.18.2020 00:13	09.18.2020 00:29
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Chloride		113 4.98	122 5.04	106 4.97	102 5.00	96.1 4.96	<5.05 5.05
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00
	<i>Analyzed:</i>	09.17.2020 20:00	09.17.2020 20:58	09.17.2020 21:17	09.17.2020 21:37	09.17.2020 21:56	09.17.2020 22:15
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Total TPH		<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8

BRL - Below Reporting Limit

*Jessica Kramer*

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

# Certificate of Analysis Summary 672801



Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Thu 09.17.2020 11:32  
**Report Date:** 09.21.2020 12:01  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672801-007	672801-008	672801-009	672801-010	672801-011	672801-012
	<i>Field Id:</i>	Bottom Hole-10 (6")	Bottom Hole-11 (2.5')	SW-7 (3.5')	SW-8 (3.5')	SW-9 (3.5')	SW-10 (3.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45
	<i>Analyzed:</i>	09.17.2020 18:01	09.17.2020 18:22	09.17.2020 19:46	09.17.2020 20:06	09.17.2020 20:27	09.17.2020 20:47
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
Toluene		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
Ethylbenzene		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
m,p-Xylenes		<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399	<0.00401 0.00401	<0.00398 0.00398	<0.00403 0.00403
o-Xylene		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
Total Xylenes		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
Total BTEX		<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.17.2020 16:50	09.17.2020 16:50	09.17.2020 16:50	09.17.2020 16:50	09.17.2020 16:50	09.17.2020 16:50
	<i>Analyzed:</i>	09.18.2020 00:34	09.18.2020 00:50	09.18.2020 00:55	09.18.2020 01:00	09.18.2020 01:06	09.18.2020 01:11
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		190 4.98	170 4.97	576 25.0	105 5.00	111 5.00	91.8 5.00
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00
	<i>Analyzed:</i>	09.17.2020 22:35	09.18.2020 10:12	09.17.2020 23:13	09.17.2020 23:33	09.18.2020 00:11	09.18.2020 00:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0

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*Jessica Kramer*

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# Certificate of Analysis Summary 672801

Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Thu 09.17.2020 11:32  
**Report Date:** 09.21.2020 12:01  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672801-013	672801-014	672801-015	672801-016	672801-017	672801-018
	<i>Field Id:</i>	SW-11 (3.5')	SW-12 (3.5')	SW-13 (3.5')	SW-14 (3.5')	SW-15 (3.5')	SW-16 (3.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45
	<i>Analyzed:</i>	09.17.2020 21:08	09.17.2020 21:28	09.17.2020 21:49	09.17.2020 22:09	09.17.2020 22:30	09.17.2020 22:50
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
Toluene		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
Ethylbenzene		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
m,p-Xylenes		<0.00404 0.00404	<0.00402 0.00402	<0.00402 0.00402	<0.00397 0.00397	<0.00398 0.00398	<0.00404 0.00404
o-Xylene		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
Total Xylenes		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
Total BTEX		<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00198 0.00198	<0.00199 0.00199	<0.00202 0.00202
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.17.2020 16:50	09.17.2020 16:50	09.18.2020 09:30	09.18.2020 09:30	09.18.2020 09:30	09.18.2020 09:30
	<i>Analyzed:</i>	09.18.2020 01:16	09.18.2020 01:21	09.18.2020 10:43	09.18.2020 10:59	09.18.2020 11:04	09.18.2020 11:10
	<i>Units/RL:</i>	mg/kg RL					
Chloride		126 5.04	99.1 4.98	89.4 5.04	103 4.98	102 5.00	108 5.05
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 15:00
	<i>Analyzed:</i>	09.18.2020 00:50	09.18.2020 01:10	09.18.2020 01:29	09.18.2020 01:48	09.18.2020 02:08	09.18.2020 02:27
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
Total TPH		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0

*Jessica Kramer*

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# Certificate of Analysis Summary 672801

Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Thu 09.17.2020 11:32  
**Report Date:** 09.21.2020 12:01  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672801-019	672801-020	672801-021	672801-022	672801-023	672801-024
	<i>Field Id:</i>	SW-17 (3.5')	SW-18 (3.5')	SW-19 (6")	SW-20 (6")	SW-21 (6")	SW-22 (6")
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45
	<i>Analyzed:</i>	09.17.2020 15:41	09.17.2020 16:02	09.17.2020 16:22	09.17.2020 16:43	09.17.2020 17:03	09.17.2020 17:24
	<i>Units/RL:</i>	mg/kg RL					
	Benzene	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200
Toluene	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
Ethylbenzene	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
m,p-Xylenes	<0.00401 0.00401	<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399	<0.00403 0.00403	<0.00400 0.00400	
o-Xylene	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
Total Xylenes	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
Total BTEX	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.18.2020 09:30	09.18.2020 09:30	09.18.2020 09:30	09.18.2020 09:30	09.18.2020 09:30	09.18.2020 09:30
	<i>Analyzed:</i>	09.18.2020 11:15	09.18.2020 11:31	09.18.2020 11:36	09.18.2020 11:41	09.18.2020 11:46	09.18.2020 11:52
	<i>Units/RL:</i>	mg/kg RL					
	Chloride	107 4.99	101 4.95	<4.95 4.95	<5.02 5.02	<4.95 4.95	<5.05 5.05
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.17.2020 15:00	09.17.2020 15:00	09.17.2020 12:00	09.17.2020 12:00	09.17.2020 12:00	09.17.2020 12:00
	<i>Analyzed:</i>	09.18.2020 02:46	09.18.2020 03:06	09.17.2020 16:07	09.17.2020 16:26	09.17.2020 16:46	09.17.2020 17:05
	<i>Units/RL:</i>	mg/kg RL					
	Gasoline Range Hydrocarbons (GRO)	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	
Motor Oil Range Hydrocarbons (MRO)	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	
Total TPH	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	

BRL - Below Reporting Limit

*Jessica Kramer*

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



# Certificate of Analysis Summary 672801

Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Thu 09.17.2020 11:32  
**Report Date:** 09.21.2020 12:01  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672801-025	672801-026	672801-027	672801-028		
	<i>Field Id:</i>	SW-23 (2.5')	SW-24 (2.5')	SW-25 (2.5')	SW-26 (2.5')		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00	09.11.2020 00:00		
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45	09.17.2020 11:45		
	<i>Analyzed:</i>	09.17.2020 17:44	09.17.2020 18:05	09.17.2020 18:25	09.17.2020 18:46		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198		
Toluene		<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198		
Ethylbenzene		<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198		
m,p-Xylenes		<0.00399 0.00399	<0.00396 0.00396	<0.00397 0.00397	<0.00397 0.00397		
o-Xylene		<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198		
Total Xylenes		<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198		
Total BTEX		<0.00200 0.00200	<0.00198 0.00198	<0.00198 0.00198	<0.00198 0.00198		
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.18.2020 09:30	09.18.2020 09:30	09.18.2020 09:30	09.18.2020 09:30		
	<i>Analyzed:</i>	09.18.2020 11:57	09.18.2020 12:13	09.18.2020 12:18	09.18.2020 12:34		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		196 4.99	181 4.96	203 4.99	198 5.03		
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.17.2020 12:00	09.17.2020 12:00	09.17.2020 12:00	09.17.2020 12:00		
	<i>Analyzed:</i>	09.17.2020 17:24	09.17.2020 17:44	09.17.2020 18:03	09.17.2020 18:23		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9		
Diesel Range Organics (DRO)		<49.9 49.9	<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	<49.9 49.9	<49.9 49.9		
Total TPH		<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9		

BRL - Below Reporting Limit

*Jessica Kramer*

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

# Analytical Report 672801

for

## Tetra Tech- Midland

Project Manager: Mike Carmona

Goldeneye 18 Federal Com #1H (10.15.19)

212C-MD-02306

09.21.2020

Collected By: Client



1211 W. Florida Ave  
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)  
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

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



09.21.2020

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **672801**

**Goldeneye 18 Federal Com #1H (10.15.19)**

Project Address: Eddy County, New Mexico

**Mike Carmona:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 672801. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 672801 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

**Jessica Kramer**

Project Manager

*A Small Business and Minority Company*

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



## Sample Cross Reference 672801

### Tetra Tech- Midland, Midland, TX

Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottom Hole-4 (3.5')	S	09.11.2020 00:00		672801-001
Bottom Hole-5 (3.5')	S	09.11.2020 00:00		672801-002
Bottom Hole-6 (3.5')	S	09.11.2020 00:00		672801-003
Bottom Hole-7 (3.5')	S	09.11.2020 00:00		672801-004
Bottom Hole-8 (3.5')	S	09.11.2020 00:00		672801-005
Bottom Hole-9 (6")	S	09.11.2020 00:00		672801-006
Bottom Hole-10 (6")	S	09.11.2020 00:00		672801-007
Bottom Hole-11 (2.5')	S	09.11.2020 00:00		672801-008
SW-7 (3.5')	S	09.11.2020 00:00		672801-009
SW-8 (3.5')	S	09.11.2020 00:00		672801-010
SW-9 (3.5')	S	09.11.2020 00:00		672801-011
SW-10 (3.5')	S	09.11.2020 00:00		672801-012
SW-11 (3.5')	S	09.11.2020 00:00		672801-013
SW-12 (3.5')	S	09.11.2020 00:00		672801-014
SW-13 (3.5')	S	09.11.2020 00:00		672801-015
SW-14 (3.5')	S	09.11.2020 00:00		672801-016
SW-15 (3.5')	S	09.11.2020 00:00		672801-017
SW-16 (3.5')	S	09.11.2020 00:00		672801-018
SW-17 (3.5')	S	09.11.2020 00:00		672801-019
SW-18 (3.5')	S	09.11.2020 00:00		672801-020
SW-19 (6")	S	09.11.2020 00:00		672801-021
SW-20 (6")	S	09.11.2020 00:00		672801-022
SW-21 (6")	S	09.11.2020 00:00		672801-023
SW-22 (6")	S	09.11.2020 00:00		672801-024
SW-23 (2.5')	S	09.11.2020 00:00		672801-025
SW-24 (2.5')	S	09.11.2020 00:00		672801-026
SW-25 (2.5')	S	09.11.2020 00:00		672801-027
SW-26 (2.5')	S	09.11.2020 00:00		672801-028



# CASE NARRATIVE

**Client Name: Tetra Tech- Midland**

**Project Name: Goldeneye 18 Federal Com #1H (10.15.19)**

Project ID: 212C-MD-02306  
Work Order Number(s): 672801

Report Date: 09.21.2020  
Date Received: 09.17.2020

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**Sample receipt non conformances and comments:**

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**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3137398 BTEX by EPA 8021B

Surrogate 1,4-Difluorobenzene recovered below QC limits. Matrix interferences is suspected.

Samples affected are: 672755-001 SD.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 672755-001 S,672755-001 SD.



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-4 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-001 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	113	4.98	mg/kg	09.17.2020 23:52		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 20:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 20:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 20:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 20:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	09.17.2020 20:00	
o-Terphenyl	84-15-1	91	%	70-130	09.17.2020 20:00	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-4 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-001 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.17.2020 15:58	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.17.2020 15:58	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.17.2020 15:58	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.17.2020 15:58	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.17.2020 15:58	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.17.2020 15:58	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.17.2020 15:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.17.2020 15:58	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.17.2020 15:58	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-5 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-002 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	122	5.04	mg/kg	09.17.2020 23:57		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 20:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 20:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 20:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 20:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	09.17.2020 20:58	
o-Terphenyl	84-15-1	89	%	70-130	09.17.2020 20:58	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-5 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-002 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 16:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 16:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 16:19	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.17.2020 16:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 16:19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 16:19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 16:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.17.2020 16:19	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.17.2020 16:19	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-6 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-003 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	106	4.97	mg/kg	09.18.2020 00:03		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 21:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 21:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 21:17	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 21:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	09.17.2020 21:17	
o-Terphenyl	84-15-1	85	%	70-130	09.17.2020 21:17	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-6 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-003 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 16:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 16:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 16:39	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.17.2020 16:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 16:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 16:39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 16:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.17.2020 16:39	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 16:39	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-7 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-004 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	102	5.00	mg/kg	09.18.2020 00:08		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 21:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 21:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 21:37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 21:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	09.17.2020 21:37	
o-Terphenyl	84-15-1	85	%	70-130	09.17.2020 21:37	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-7 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-004 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.17.2020 17:00	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.17.2020 17:00	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.17.2020 17:00	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	09.17.2020 17:00	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.17.2020 17:00	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.17.2020 17:00	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.17.2020 17:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.17.2020 17:00	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.17.2020 17:00	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-8 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-005 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	96.1	4.96	mg/kg	09.18.2020 00:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.17.2020 21:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.17.2020 21:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.17.2020 21:56	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.17.2020 21:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	09.17.2020 21:56	
o-Terphenyl	84-15-1	83	%	70-130	09.17.2020 21:56	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-8 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-005 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 17:20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 17:20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 17:20	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.17.2020 17:20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 17:20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 17:20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 17:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.17.2020 17:20	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 17:20	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-9 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-006 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.05	5.05	mg/kg	09.18.2020 00:29	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.17.2020 22:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.17.2020 22:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.17.2020 22:15	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.17.2020 22:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	09.17.2020 22:15	
o-Terphenyl	84-15-1	94	%	70-130	09.17.2020 22:15	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-9 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-006 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.17.2020 17:41	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.17.2020 17:41	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.17.2020 17:41	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.17.2020 17:41	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.17.2020 17:41	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.17.2020 17:41	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.17.2020 17:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.17.2020 17:41	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 17:41	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-10 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-007 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	190	4.98	mg/kg	09.18.2020 00:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 22:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 22:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 22:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 22:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	09.17.2020 22:35	
o-Terphenyl	84-15-1	84	%	70-130	09.17.2020 22:35	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-10 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-007 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.17.2020 18:01	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.17.2020 18:01	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.17.2020 18:01	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.17.2020 18:01	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.17.2020 18:01	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.17.2020 18:01	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.17.2020 18:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.17.2020 18:01	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 18:01	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-11 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-008 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	170	4.97	mg/kg	09.18.2020 00:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.18.2020 10:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.18.2020 10:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.18.2020 10:12	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.18.2020 10:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	09.18.2020 10:12	
o-Terphenyl	84-15-1	96	%	70-130	09.18.2020 10:12	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-11 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-008 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.17.2020 18:22	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.17.2020 18:22	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.17.2020 18:22	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.17.2020 18:22	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.17.2020 18:22	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.17.2020 18:22	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.17.2020 18:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.17.2020 18:22	
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.17.2020 18:22	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-7 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-009 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	576	25.0	mg/kg	09.18.2020 00:55		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 23:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 23:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 23:13	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 23:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	09.17.2020 23:13	
o-Terphenyl	84-15-1	90	%	70-130	09.17.2020 23:13	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-7 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-009 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 19:46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 19:46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 19:46	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.17.2020 19:46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 19:46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 19:46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 19:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.17.2020 19:46	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.17.2020 19:46	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-8 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-010 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	105	5.00	mg/kg	09.18.2020 01:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.17.2020 23:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.17.2020 23:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.17.2020 23:33	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.17.2020 23:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	09.17.2020 23:33	
o-Terphenyl	84-15-1	90	%	70-130	09.17.2020 23:33	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-8 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-010 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 20:06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 20:06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 20:06	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.17.2020 20:06	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 20:06	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 20:06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 20:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.17.2020 20:06	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 20:06	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-9 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-011 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	111	5.00	mg/kg	09.18.2020 01:06		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.2020 00:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.2020 00:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.2020 00:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.18.2020 00:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	09.18.2020 00:11	
o-Terphenyl	84-15-1	91	%	70-130	09.18.2020 00:11	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-9 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-011 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.17.2020 20:27	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.17.2020 20:27	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.17.2020 20:27	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.17.2020 20:27	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.17.2020 20:27	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.17.2020 20:27	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.17.2020 20:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.17.2020 20:27	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.17.2020 20:27	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-10 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-012 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	91.8	5.00	mg/kg	09.18.2020 01:11		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.2020 00:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.2020 00:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.2020 00:31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.18.2020 00:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	09.18.2020 00:31	
o-Terphenyl	84-15-1	97	%	70-130	09.18.2020 00:31	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-10 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-012 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.17.2020 20:47	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.17.2020 20:47	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.17.2020 20:47	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.17.2020 20:47	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.17.2020 20:47	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.17.2020 20:47	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.17.2020 20:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.17.2020 20:47	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 20:47	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-11 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-013 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	126	5.04	mg/kg	09.18.2020 01:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.18.2020 00:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.18.2020 00:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.18.2020 00:50	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.18.2020 00:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	09.18.2020 00:50	
o-Terphenyl	84-15-1	101	%	70-130	09.18.2020 00:50	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-11 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-013 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.17.2020 21:08	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.17.2020 21:08	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.17.2020 21:08	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	09.17.2020 21:08	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.17.2020 21:08	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.17.2020 21:08	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.17.2020 21:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.17.2020 21:08	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 21:08	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-12 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-014 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.17.2020 16:50 Basis: Wet Weight  
 Seq Number: 3137492

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	99.1	4.98	mg/kg	09.18.2020 01:21		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.2020 01:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.2020 01:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.2020 01:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.18.2020 01:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	09.18.2020 01:10	
o-Terphenyl	84-15-1	86	%	70-130	09.18.2020 01:10	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-12 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-014 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.17.2020 21:28	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.17.2020 21:28	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.17.2020 21:28	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.17.2020 21:28	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.17.2020 21:28	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.17.2020 21:28	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.17.2020 21:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.17.2020 21:28	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.17.2020 21:28	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-13 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-015 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	89.4	5.04	mg/kg	09.18.2020 10:43		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.18.2020 01:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.18.2020 01:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.18.2020 01:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.18.2020 01:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	09.18.2020 01:29	
o-Terphenyl	84-15-1	90	%	70-130	09.18.2020 01:29	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-13 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-015 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.17.2020 21:49	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.17.2020 21:49	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.17.2020 21:49	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.17.2020 21:49	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.17.2020 21:49	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.17.2020 21:49	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.17.2020 21:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 21:49	
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.17.2020 21:49	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-14 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-016 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	103	4.98	mg/kg	09.18.2020 10:59		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.2020 01:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.2020 01:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.2020 01:48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.18.2020 01:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	09.18.2020 01:48	
o-Terphenyl	84-15-1	94	%	70-130	09.18.2020 01:48	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-14 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-016 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.17.2020 22:09	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.17.2020 22:09	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.17.2020 22:09	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.17.2020 22:09	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.17.2020 22:09	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.17.2020 22:09	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.17.2020 22:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.17.2020 22:09	
1,4-Difluorobenzene	540-36-3	97	%	70-130	09.17.2020 22:09	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-15 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-017 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	102	5.00	mg/kg	09.18.2020 11:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.2020 02:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.2020 02:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.2020 02:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.18.2020 02:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	09.18.2020 02:08	
o-Terphenyl	84-15-1	91	%	70-130	09.18.2020 02:08	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-15 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-017 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.17.2020 22:30	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.17.2020 22:30	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.17.2020 22:30	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.17.2020 22:30	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.17.2020 22:30	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.17.2020 22:30	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.17.2020 22:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 22:30	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.17.2020 22:30	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-16 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-018 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	108	5.05	mg/kg	09.18.2020 11:10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.2020 02:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.2020 02:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.2020 02:27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.18.2020 02:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	09.18.2020 02:27	
o-Terphenyl	84-15-1	96	%	70-130	09.18.2020 02:27	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-16 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-018 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137398

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.17.2020 22:50	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.17.2020 22:50	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.17.2020 22:50	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	09.17.2020 22:50	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.17.2020 22:50	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.17.2020 22:50	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.17.2020 22:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 22:50	
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.17.2020 22:50	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-17 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-019 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	107	4.99	mg/kg	09.18.2020 11:15		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.18.2020 02:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.18.2020 02:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.18.2020 02:46	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.18.2020 02:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	09.18.2020 02:46	
o-Terphenyl	84-15-1	97	%	70-130	09.18.2020 02:46	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-17 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-019 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 15:41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 15:41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 15:41	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.17.2020 15:41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 15:41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 15:41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 15:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 15:41	
4-Bromofluorobenzene	460-00-4	95	%	70-130	09.17.2020 15:41	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-18 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-020 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	101	4.95	mg/kg	09.18.2020 11:31		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137515

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.18.2020 03:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.18.2020 03:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.18.2020 03:06	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.18.2020 03:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	09.18.2020 03:06	
o-Terphenyl	84-15-1	98	%	70-130	09.18.2020 03:06	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-18 (3.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-020 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.17.2020 16:02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.17.2020 16:02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.17.2020 16:02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.17.2020 16:02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.17.2020 16:02	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.17.2020 16:02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.17.2020 16:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.17.2020 16:02	
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.17.2020 16:02	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-19 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-021 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	09.18.2020 11:36	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 12:00 Basis: Wet Weight  
 Seq Number: 3137526

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 16:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 16:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 16:07	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 16:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	09.17.2020 16:07	
o-Terphenyl	84-15-1	93	%	70-130	09.17.2020 16:07	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-19 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-021 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 16:22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 16:22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 16:22	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.17.2020 16:22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 16:22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 16:22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 16:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	09.17.2020 16:22	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.17.2020 16:22	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-20 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-022 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.02	5.02	mg/kg	09.18.2020 11:41	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 12:00 Basis: Wet Weight  
 Seq Number: 3137526

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.17.2020 16:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.17.2020 16:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.17.2020 16:26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.17.2020 16:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	09.17.2020 16:26	
o-Terphenyl	84-15-1	91	%	70-130	09.17.2020 16:26	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-20 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-022 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 16:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 16:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 16:43	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.17.2020 16:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 16:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 16:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 16:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	09.17.2020 16:43	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.17.2020 16:43	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-21 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-023 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	09.18.2020 11:46	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 12:00 Basis: Wet Weight  
 Seq Number: 3137526

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 16:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 16:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 16:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 16:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	09.17.2020 16:46	
o-Terphenyl	84-15-1	88	%	70-130	09.17.2020 16:46	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-21 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-023 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.17.2020 17:03	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.17.2020 17:03	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.17.2020 17:03	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.17.2020 17:03	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.17.2020 17:03	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.17.2020 17:03	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.17.2020 17:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	09.17.2020 17:03	
4-Bromofluorobenzene	460-00-4	85	%	70-130	09.17.2020 17:03	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-22 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-024 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.05	5.05	mg/kg	09.18.2020 11:52	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 12:00 Basis: Wet Weight  
 Seq Number: 3137526

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.17.2020 17:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.17.2020 17:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.17.2020 17:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.17.2020 17:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	09.17.2020 17:05	
o-Terphenyl	84-15-1	87	%	70-130	09.17.2020 17:05	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-22 (6")** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-024 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 17:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 17:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 17:24	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.17.2020 17:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 17:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 17:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 17:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.17.2020 17:24	
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.17.2020 17:24	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-23 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-025 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	196	4.99	mg/kg	09.18.2020 11:57		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 12:00 Basis: Wet Weight  
 Seq Number: 3137526

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.17.2020 17:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.17.2020 17:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.17.2020 17:24	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.17.2020 17:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	09.17.2020 17:24	
o-Terphenyl	84-15-1	96	%	70-130	09.17.2020 17:24	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-23 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-025 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.17.2020 17:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.17.2020 17:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.17.2020 17:44	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.17.2020 17:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.17.2020 17:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.17.2020 17:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.17.2020 17:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	09.17.2020 17:44	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.17.2020 17:44	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-24 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-026 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	181	4.96	mg/kg	09.18.2020 12:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 12:00 Basis: Wet Weight  
 Seq Number: 3137526

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.17.2020 17:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.17.2020 17:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.17.2020 17:44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.17.2020 17:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	09.17.2020 17:44	
o-Terphenyl	84-15-1	89	%	70-130	09.17.2020 17:44	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-24 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-026 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.17.2020 18:05	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.17.2020 18:05	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.17.2020 18:05	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	09.17.2020 18:05	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.17.2020 18:05	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.17.2020 18:05	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.17.2020 18:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.17.2020 18:05	
4-Bromofluorobenzene	460-00-4	118	%	70-130	09.17.2020 18:05	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-25 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-027 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	203	4.99	mg/kg	09.18.2020 12:18		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 12:00 Basis: Wet Weight  
 Seq Number: 3137526

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.17.2020 18:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.17.2020 18:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.17.2020 18:03	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.17.2020 18:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	09.17.2020 18:03	
o-Terphenyl	84-15-1	90	%	70-130	09.17.2020 18:03	



# Certificate of Analytical Results 672801

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-25 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-027 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.17.2020 18:25	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.17.2020 18:25	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.17.2020 18:25	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.17.2020 18:25	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.17.2020 18:25	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.17.2020 18:25	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.17.2020 18:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.17.2020 18:25	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.17.2020 18:25	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-26 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-028 Date Collected: 09.11.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 09:30 Basis: Wet Weight  
 Seq Number: 3137631

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	198	5.03	mg/kg	09.18.2020 12:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.17.2020 12:00 Basis: Wet Weight  
 Seq Number: 3137526

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.17.2020 18:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.17.2020 18:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.17.2020 18:23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.17.2020 18:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	09.17.2020 18:23	
o-Terphenyl	84-15-1	87	%	70-130	09.17.2020 18:23	



# Certificate of Analytical Results 672801

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-26 (2.5')** Matrix: Soil Date Received: 09.17.2020 11:32  
 Lab Sample Id: 672801-028 Date Collected: 09.11.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.17.2020 11:45 Basis: Wet Weight  
 Seq Number: 3137472

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.17.2020 18:46	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.17.2020 18:46	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.17.2020 18:46	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.17.2020 18:46	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.17.2020 18:46	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.17.2020 18:46	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.17.2020 18:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.17.2020 18:46	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.17.2020 18:46	





**Tetra Tech- Midland**  
Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137492

MB Sample Id: 7711564-1-BLK

Matrix: Solid

LCS Sample Id: 7711564-1-BKS

Prep Method: E300P

Date Prep: 09.17.2020

LCSD Sample Id: 7711564-1-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	258	103	90-110	0	20	mg/kg	09.17.2020 22:49	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137631

MB Sample Id: 7711581-1-BLK

Matrix: Solid

LCS Sample Id: 7711581-1-BKS

Prep Method: E300P

Date Prep: 09.18.2020

LCSD Sample Id: 7711581-1-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	256	102	90-110	0	20	mg/kg	09.18.2020 10:33	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137492

Parent Sample Id: 672757-008

Matrix: Soil

MS Sample Id: 672757-008 S

Prep Method: E300P

Date Prep: 09.17.2020

MSD Sample Id: 672757-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	320	250	595	110	586	106	90-110	2	20	mg/kg	09.17.2020 23:05	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137492

Parent Sample Id: 672801-005

Matrix: Soil

MS Sample Id: 672801-005 S

Prep Method: E300P

Date Prep: 09.17.2020

MSD Sample Id: 672801-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	96.1	248	366	109	360	106	90-110	2	20	mg/kg	09.18.2020 00:18	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137631

Parent Sample Id: 672801-015

Matrix: Soil

MS Sample Id: 672801-015 S

Prep Method: E300P

Date Prep: 09.18.2020

MSD Sample Id: 672801-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	89.4	252	350	103	350	103	90-110	0	20	mg/kg	09.18.2020 10:49	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137631

Parent Sample Id: 672801-025

Matrix: Soil

MS Sample Id: 672801-025 S

Prep Method: E300P

Date Prep: 09.18.2020

MSD Sample Id: 672801-025 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	196	250	459	105	462	106	90-110	1	20	mg/kg	09.18.2020 12:02	

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

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

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

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



**Tetra Tech- Midland**  
Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137526

MB Sample Id: 7711572-1-BLK

Matrix: Solid

LCS Sample Id: 7711572-1-BKS

Prep Method: SW8015P

Date Prep: 09.17.2020

LCSD Sample Id: 7711572-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1010	101	1130	113	70-130	11	20	mg/kg	09.17.2020 10:37	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	1150	115	70-130	11	20	mg/kg	09.17.2020 10:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	79		100		113		70-130	%	09.17.2020 10:37
o-Terphenyl	88		103		112		70-130	%	09.17.2020 10:37

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137515

MB Sample Id: 7711575-1-BLK

Matrix: Solid

LCS Sample Id: 7711575-1-BKS

Prep Method: SW8015P

Date Prep: 09.17.2020

LCSD Sample Id: 7711575-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1030	103	987	99	70-130	4	20	mg/kg	09.17.2020 19:21	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1010	101	70-130	4	20	mg/kg	09.17.2020 19:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		106		97		70-130	%	09.17.2020 19:21
o-Terphenyl	103		105		102		70-130	%	09.17.2020 19:21

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137526

Matrix: Solid  
MB Sample Id: 7711572-1-BLK

Prep Method: SW8015P

Date Prep: 09.17.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.17.2020 10:18	

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137515

Matrix: Solid  
MB Sample Id: 7711575-1-BLK

Prep Method: SW8015P

Date Prep: 09.17.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.17.2020 19:02	

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

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

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

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



**Tetra Tech- Midland**  
Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137526  
Parent Sample Id: 672757-002

Matrix: Soil  
MS Sample Id: 672757-002 S

Prep Method: SW8015P  
Date Prep: 09.17.2020  
MSD Sample Id: 672757-002 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)	80.0	997	1020	94	1010	93	70-130	1	20	mg/kg	09.17.2020 11:35	
Diesel Range Organics (DRO)	1300	997	1890	59	1840	54	70-130	3	20	mg/kg	09.17.2020 11:35	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		98		70-130	%	09.17.2020 11:35
o-Terphenyl	111		109		70-130	%	09.17.2020 11:35

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137515  
Parent Sample Id: 672801-001

Matrix: Soil  
MS Sample Id: 672801-001 S

Prep Method: SW8015P  
Date Prep: 09.17.2020  
MSD Sample Id: 672801-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	941	94	937	94	70-130	0	20	mg/kg	09.17.2020 20:19	
Diesel Range Organics (DRO)	<49.9	997	942	94	926	93	70-130	2	20	mg/kg	09.17.2020 20:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		93		70-130	%	09.17.2020 20:19
o-Terphenyl	93		91		70-130	%	09.17.2020 20:19

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

Seq Number: 3137398  
MB Sample Id: 7711529-1-BLK

Matrix: Solid  
LCS Sample Id: 7711529-1-BKS

Prep Method: SW5035A  
Date Prep: 09.17.2020  
LCSD Sample Id: 7711529-1-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	0.0908	91	0.0907	91	70-130	0	35	mg/kg	09.17.2020 10:32	
Toluene	<0.00200	0.100	0.0886	89	0.0890	89	70-130	0	35	mg/kg	09.17.2020 10:32	
Ethylbenzene	<0.00200	0.100	0.0887	89	0.0900	90	70-130	1	35	mg/kg	09.17.2020 10:32	
m,p-Xylenes	<0.00400	0.200	0.176	88	0.180	90	70-130	2	35	mg/kg	09.17.2020 10:32	
o-Xylene	<0.00200	0.100	0.0877	88	0.0894	89	70-130	2	35	mg/kg	09.17.2020 10:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		98		97		70-130	%	09.17.2020 10:32
4-Bromofluorobenzene	105		95		97		70-130	%	09.17.2020 10:32

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

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

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

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



**Tetra Tech- Midland**  
Goldeneye 18 Federal Com #1H (10.15.19)

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

Seq Number: 3137472

MB Sample Id: 7711574-1-BLK

Matrix: Solid

LCS Sample Id: 7711574-1-BKS

Prep Method: SW5035A

Date Prep: 09.17.2020

LCSD Sample Id: 7711574-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.101	101	0.0995	100	70-130	1	35	mg/kg	09.17.2020 11:44	
Toluene	<0.00200	0.100	0.108	108	0.106	106	70-130	2	35	mg/kg	09.17.2020 11:44	
Ethylbenzene	<0.00200	0.100	0.115	115	0.112	112	70-130	3	35	mg/kg	09.17.2020 11:44	
m,p-Xylenes	<0.00400	0.200	0.232	116	0.223	112	70-130	4	35	mg/kg	09.17.2020 11:44	
o-Xylene	<0.00200	0.100	0.113	113	0.108	108	70-130	5	35	mg/kg	09.17.2020 11:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		100		100		70-130	%	09.17.2020 11:44
4-Bromofluorobenzene	73		115		110		70-130	%	09.17.2020 11:44

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

Seq Number: 3137398

Parent Sample Id: 672755-001

Matrix: Soil

MS Sample Id: 672755-001 S

Prep Method: SW5035A

Date Prep: 09.17.2020

MSD Sample Id: 672755-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.144	0.994	0.168	2	0.147	0	70-130	13	35	mg/kg	09.17.2020 11:33	X
Toluene	1.73	0.994	0.0522	0	0.0687	0	70-130	27	35	mg/kg	09.17.2020 11:33	X
Ethylbenzene	4.31	0.994	6.34	204	6.46	217	70-130	2	35	mg/kg	09.17.2020 11:33	X
m,p-Xylenes	14.2	1.99	19.7	276	19.8	283	70-130	1	35	mg/kg	09.17.2020 11:33	X
o-Xylene	8.31	0.994	11.4	311	11.5	322	70-130	1	35	mg/kg	09.17.2020 11:33	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		14	**	70-130	%	09.17.2020 11:33
4-Bromofluorobenzene	367	**	256	**	70-130	%	09.17.2020 11:33

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

Seq Number: 3137472

Parent Sample Id: 672801-019

Matrix: Soil

MS Sample Id: 672801-019 S

Prep Method: SW5035A

Date Prep: 09.17.2020

MSD Sample Id: 672801-019 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	0.0766	76	0.0875	88	70-130	13	35	mg/kg	09.17.2020 14:01	
Toluene	<0.00202	0.101	0.0810	80	0.0968	97	70-130	18	35	mg/kg	09.17.2020 14:01	
Ethylbenzene	<0.00202	0.101	0.0842	83	0.102	102	70-130	19	35	mg/kg	09.17.2020 14:01	
m,p-Xylenes	<0.00403	0.202	0.167	83	0.202	102	70-130	19	35	mg/kg	09.17.2020 14:01	
o-Xylene	<0.00202	0.101	0.0803	80	0.0979	98	70-130	20	35	mg/kg	09.17.2020 14:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		96		70-130	%	09.17.2020 14:01
4-Bromofluorobenzene	102		112		70-130	%	09.17.2020 14:01

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

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

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

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



# Tetra Tech, Inc.

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

Analysis Request of Custody Record

ANALYSIS REQUEST  
(Circle or Specify Method No.)

072801

Client Name: COG  
Site Manager: Mike Carmona

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)  
Project #: 212C-MD-02306

Project Location: Eddy County, New Mexico

Invoice to: Ike Tavaraz  
Sampler Signature: Devin D

Receiving Laboratory: Xenco Labs

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX				PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	REMARKS
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE					
	Bottom Hole-4 (3.5')	9/11/2020		X	X	X	X	X	X	1	X		
	Bottom Hole-5 (3.5')	9/11/2020		X	X	X	X	X	X	1	X		
	Bottom Hole-6 (3.5')	9/11/2020		X	X	X	X	X	X	1	X		
	Bottom Hole-7 (3.5')	9/11/2020		X	X	X	X	X	X	1	X		
	Bottom Hole-8 (3.5')	9/11/2020		X	X	X	X	X	X	1	X		
	Bottom Hole-9 (6")	9/11/2020		X	X	X	X	X	X	1	X		
	Bottom Hole-10 (6")	9/11/2020		X	X	X	X	X	X	1	X		
	Bottom Hole-11 (2.5')	9/11/2020		X	X	X	X	X	X	1	X		
	SW-7 (3.5')	9/11/2020		X	X	X	X	X	X	1	X		
	SW-8 (3.5')	9/11/2020		X	X	X	X	X	X	1	X		
	SW-9 (3.5')	9/11/2020		X	X	X	X	X	X	1	X		

Relinquished by: Mike Carmona  
Date: 9/17/20  
Time: 1132

Received by: [Signature]  
Date: 9/17  
Time: 1132

Relinquished by: [Signature]  
Date: 1.10/12  
Time: [Signature]

LAB USE ONLY

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

Sample Temperature  
1.10/12

REMARKS:

ORIGINAL COPY

Analysis Request of Custody Record



**Tetra Tech, Inc.**

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

1072801

ANALYSIS REQUEST

(Circle or Specify Method No.)

Client Name: COG Site Manager: Mike Carmona

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

Project Location: Eddy County, New Mexico

Project #: 212C-MD-02306

Invoice to: Ike Tavarez

Receiving Laboratory: Xenoco Labs

Sampler Signature: Devin D

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>		
SW-10 (3.5')		9/1/2020		X				X	
SW-11 (3.5')		9/1/2020		X				X	
SW-12 (3.5')		9/1/2020		X				X	
SW-13 (3.5')		9/1/2020		X				X	
SW-14 (3.5')		9/1/2020		X				X	
SW-15 (3.5')		9/1/2020		X				X	
SW-16 (3.5')		9/1/2020		X				X	
SW-17 (3.5')		9/1/2020		X				X	
SW-18 (3.5')		9/1/2020		X				X	
SW-19 (6")		9/1/2020		X				X	

Relinquished by: Mike Carmona Date: 9/17/20 Time: 11:32  
 Relinquished by: Date: Time:  
 Relinquished by: Date: Time:  
 Relinquished by: Date: Time:

LAB USE ONLY

Sample Temperature: 10/1.2

REMARKS:

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

(Circle) HAND DELIVERED INDEX UPS Tracking #:

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B

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 300.0

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

ORIGINAL COPY

Analysis Request of Custody Record



**Tetra Tech, Inc.**

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

Client Name: COG Site Manager: Mike Carmona

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

Project Location: Eddy County, New Mexico Project #: 212C-MD-02306

Invoice to: Ike Tavarez

Receiving Laboratory: Xenco Labs

Sampler Signature: Devin D

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX				# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>		
	SW-20 (6")	9/11/2020		X				1	
	SW-21 (6")	9/11/2020		X				1	
	SW-22 (6")	9/11/2020		X				1	
	SW-23 (2.5)	9/11/2020		X				1	
	SW-24 (2.5)	9/11/2020		X				1	
	SW-25 (2.5)	9/11/2020		X				1	
	SW-26 (2.5)	9/11/2020		X				1	

Relinquished by: <i>Mike</i>	Date: 9/17/20	Time: 1132	Received by: <i>[Signature]</i>	Date: 9/17	Time: 1132
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

ANALYSIS REQUEST  
(Circle or Specify Method No.)

1072801

<input checked="" type="checkbox"/>	BTEX 8021B
<input checked="" type="checkbox"/>	TPH TX1005 (Ext to C35)
<input checked="" type="checkbox"/>	TPH 8015M ( GRO - DRO - ORO - MRO)
<input checked="" type="checkbox"/>	PAH 8270C
<input checked="" type="checkbox"/>	Total Metals Ag As Ba Cd Cr Pb Se Hg
<input checked="" type="checkbox"/>	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
<input checked="" type="checkbox"/>	TCLP Volatiles
<input checked="" type="checkbox"/>	TCLP Semi Volatiles
<input checked="" type="checkbox"/>	RCI
<input checked="" type="checkbox"/>	GC/MS Vol. 8260B / 624
<input checked="" type="checkbox"/>	GC/MS Semi. Vol. 8270C/625
<input checked="" type="checkbox"/>	PCB's 8082 / 608
<input checked="" type="checkbox"/>	NORM
<input checked="" type="checkbox"/>	PLM (Asbestos)
<input checked="" type="checkbox"/>	Chloride 300.0
<input checked="" type="checkbox"/>	Chloride Sulfate TDS
<input checked="" type="checkbox"/>	General Water Chemistry (see attached list)
<input checked="" type="checkbox"/>	Anion/Cation Balance
<input checked="" type="checkbox"/>	Hold

LAB USE ONLY

Sample Temperature

REMARKS:

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

(Circle) HAND DELIVERED INDEX UPS Tracking #:

ORIGINAL COPY

# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 09.17.2020 11.32.00 AM

Work Order #: 672801

Acceptable Temperature Range: 0 - 6 degC  
Air and Metal samples Acceptable Range: Ambient  
Temperature Measuring device used : IR-8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.2	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6*Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	BTEX was in bulk container
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	N/A	
#18 Water VOC samples have zero headspace?	N/A	

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 09.17.2020  
 Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 09.17.2020  
 Jessica Kramer



# Certificate of Analysis Summary 672983

Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212c-md-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Fri 09.18.2020 14:37  
**Report Date:** 09.21.2020 14:55  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672983-001	672983-002	672983-003	672983-004	672983-005	672983-006
	<i>Field Id:</i>	Bottom Hole-12 (4')	Bottom Hole-13 (4')	Bottom Hole-14 (2.5')	Bottom Hole-15 (2.5')	Bottom Hole-16 (2.5')	Bottom Hole-17 (2.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15
	<i>Analyzed:</i>	09.18.2020 18:10	09.18.2020 18:31	09.18.2020 18:51	09.18.2020 19:12	09.18.2020 19:32	09.18.2020 19:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00400 0.00400	<0.00403 0.00403	<0.00402 0.00402	<0.00402 0.00402	<0.00399 0.00399	<0.00402 0.00402
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Total Xylenes		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
Total BTEX		<0.00200 0.00200	<0.00202 0.00202	<0.00201 0.00201	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30
	<i>Analyzed:</i>	09.18.2020 21:08	09.18.2020 21:14	09.18.2020 21:19	09.18.2020 21:35	09.18.2020 21:40	09.18.2020 21:45
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		316 5.00	344 4.98	89.7 5.02	86.5 4.99	74.2 4.97	90.4 4.95
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00
	<i>Analyzed:</i>	09.18.2020 23:11	09.19.2020 00:17	09.19.2020 00:39	09.19.2020 01:01	09.19.2020 01:23	09.19.2020 01:45
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

*Jessica Kramer*

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

# Certificate of Analysis Summary 672983



Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212c-md-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Fri 09.18.2020 14:37  
**Report Date:** 09.21.2020 14:55  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672983-007	672983-008	672983-009	672983-010	672983-011	672983-012
	<i>Field Id:</i>	Bottom Hole-18 (3.5')	Bottom Hole-19 (3.5')	SW-27 (4')	SW-28 (4')	SW-29 (4')	SW-30 (4')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15
	<i>Analyzed:</i>	09.18.2020 20:13	09.18.2020 20:34	09.18.2020 20:54	09.18.2020 21:15	09.18.2020 22:38	09.18.2020 22:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Benzene	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
Ethylbenzene	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
m,p-Xylenes	<0.00400 0.00400	<0.00398 0.00398	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399	<0.00399 0.00399	
o-Xylene	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
Total Xylenes	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
Total BTEX	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30
	<i>Analyzed:</i>	09.18.2020 21:51	09.18.2020 21:56	09.18.2020 22:01	09.18.2020 22:17	09.18.2020 22:22	09.18.2020 22:38
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Chloride	52.9 5.04	51.8 5.02	378 4.96	339 5.00	337 4.99	370 5.04
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00
	<i>Analyzed:</i>	09.19.2020 02:07	09.19.2020 02:29	09.19.2020 02:51	09.19.2020 03:13	09.19.2020 03:57	09.19.2020 04:19
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Gasoline Range Hydrocarbons (GRO)	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	
Motor Oil Range Hydrocarbons (MRO)	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	
Total TPH	<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	

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*Jessica Kramer*

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# Certificate of Analysis Summary 672983



Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212c-md-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Fri 09.18.2020 14:37  
**Report Date:** 09.21.2020 14:55  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672983-013	672983-014	672983-015	672983-016	672983-017	672983-018
	<i>Field Id:</i>	SW-31 (4')	SW-32 (4')	SW-33 (2.5')	SW-34 (2.5')	SW-35 (2.5')	SW-36 (2.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:15
	<i>Analyzed:</i>	09.18.2020 23:19	09.18.2020 23:40	09.19.2020 00:00	09.19.2020 00:21	09.19.2020 00:41	09.19.2020 01:02
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199
m,p-Xylenes		<0.00397 0.00397	<0.00400 0.00400	<0.00398 0.00398	<0.00404 0.00404	<0.00403 0.00403	<0.00398 0.00398
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00199 0.00199
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30	09.18.2020 16:30
	<i>Analyzed:</i>	09.18.2020 22:44	09.18.2020 22:49	09.18.2020 22:54	09.18.2020 22:59	09.18.2020 23:05	09.18.2020 23:10
	<i>Units/RL:</i>	mg/kg RL					
Chloride		343 4.97	86.2 4.99	85.7 4.96	93.6 5.00	82.7 5.00	81.9 5.00
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00
	<i>Analyzed:</i>	09.19.2020 04:41	09.19.2020 05:03	09.19.2020 05:25	09.19.2020 05:47	09.19.2020 06:09	09.19.2020 06:30
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

*Jessica Kramer*

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# Certificate of Analysis Summary 672983



Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212c-md-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Fri 09.18.2020 14:37  
**Report Date:** 09.21.2020 14:55  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672983-019	672983-020	672983-021	672983-022	672983-023	672983-024
	<i>Field Id:</i>	SW-37 (2.5')	SW-38 (2.5')	SW-39 (2.5')	SW-40 (2.5')	SW-41 (3.5')	SW-42 (3.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.18.2020 15:15	09.18.2020 15:15	09.18.2020 15:00	09.18.2020 15:00	09.18.2020 15:00	09.18.2020 15:00
	<i>Analyzed:</i>	09.19.2020 01:22	09.19.2020 01:43	09.18.2020 20:52	09.18.2020 21:13	09.18.2020 21:34	09.18.2020 21:54
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201
Toluene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201
Ethylbenzene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201
m,p-Xylenes		<0.00396 0.00396	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00403 0.00403	<0.00402 0.00402
o-Xylene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201
Total Xylenes		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201
Total BTEX		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00202 0.00202	<0.00201 0.00201
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00
	<i>Analyzed:</i>	09.18.2020 23:42	09.18.2020 23:57	09.19.2020 00:03	09.19.2020 00:08	09.19.2020 00:13	09.19.2020 21:44
	<i>Units/RL:</i>	mg/kg RL					
Chloride		84.1 4.95	79.4 5.04	84.2 4.98	97.9 5.00	55.2 5.02	53.9 4.96
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00
	<i>Analyzed:</i>	09.19.2020 06:53	09.19.2020 07:15	09.19.2020 04:25	09.19.2020 05:23	09.19.2020 05:42	09.19.2020 06:02
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

*Jessica Kramer*

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



# Certificate of Analysis Summary 672983

Tetra Tech- Midland, Midland, TX

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212c-md-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County, New Mexico

**Date Received in Lab:** Fri 09.18.2020 14:37  
**Report Date:** 09.21.2020 14:55  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	672983-025	672983-026	672983-027	672983-028		
	<i>Field Id:</i>	SW-43 (3.5')	SW-44 (3.5')	SW-45 (3.5')	SW-46 (3.5')		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00	09.17.2020 00:00		
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.18.2020 15:00	09.18.2020 15:00	09.18.2020 15:00	09.18.2020 15:00		
	<i>Analyzed:</i>	09.18.2020 22:15	09.18.2020 22:35	09.18.2020 22:56	09.18.2020 23:16		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198		
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198		
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198		
m,p-Xylenes		<0.00404 0.00404	<0.00400 0.00400	<0.00399 0.00399	<0.00397 0.00397		
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198		
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198		
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00198 0.00198		
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00		
	<i>Analyzed:</i>	09.19.2020 21:50	09.19.2020 21:55	09.19.2020 22:00	09.19.2020 22:06		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		56.9 4.98	58.9 5.04	48.9 4.96	47.7 4.97		
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00	09.18.2020 17:00		
	<i>Analyzed:</i>	09.19.2020 06:21	09.19.2020 06:40	09.19.2020 06:59	09.19.2020 07:19		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0		
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0		
Total TPH		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0		

BRL - Below Reporting Limit

*Jessica Kramer*

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

# Analytical Report 672983

for

## Tetra Tech- Midland

Project Manager: Mike Carmona

Goldeneye 18 Federal Com #1H (10.15.19)

212c-md-02306

09.21.2020

Collected By: Client



1211 W. Florida Ave  
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)  
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

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



09.21.2020

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **672983**

**Goldeneye 18 Federal Com #1H (10.15.19)**

Project Address: Eddy County, New Mexico

**Mike Carmona:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 672983. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 672983 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

**Jessica Kramer**

Project Manager

*A Small Business and Minority Company*

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



## Sample Cross Reference 672983

### Tetra Tech- Midland, Midland, TX

Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottom Hole-12 (4')	S	09.17.2020 00:00		672983-001
Bottom Hole-13 (4')	S	09.17.2020 00:00		672983-002
Bottom Hole-14 (2.5')	S	09.17.2020 00:00		672983-003
Bottom Hole-15 (2.5')	S	09.17.2020 00:00		672983-004
Bottom Hole-16 (2.5')	S	09.17.2020 00:00		672983-005
Bottom Hole-17 (2.5')	S	09.17.2020 00:00		672983-006
Bottom Hole-18 (3.5')	S	09.17.2020 00:00		672983-007
Bottom Hole-19 (3.5')	S	09.17.2020 00:00		672983-008
SW-27 (4')	S	09.17.2020 00:00		672983-009
SW-28 (4')	S	09.17.2020 00:00		672983-010
SW-29 (4')	S	09.17.2020 00:00		672983-011
SW-30 (4')	S	09.17.2020 00:00		672983-012
SW-31 (4')	S	09.17.2020 00:00		672983-013
SW-32 (4')	S	09.17.2020 00:00		672983-014
SW-33 (2.5')	S	09.17.2020 00:00		672983-015
SW-34 (2.5')	S	09.17.2020 00:00		672983-016
SW-35 (2.5')	S	09.17.2020 00:00		672983-017
SW-36 (2.5')	S	09.17.2020 00:00		672983-018
SW-37 (2.5')	S	09.17.2020 00:00		672983-019
SW-38 (2.5')	S	09.17.2020 00:00		672983-020
SW-39 (2.5")	S	09.17.2020 00:00		672983-021
SW-40 (2.5')	S	09.17.2020 00:00		672983-022
SW-41 (3.5')	S	09.17.2020 00:00		672983-023
SW-42 (3.5')	S	09.17.2020 00:00		672983-024
SW-43 (3.5')	S	09.17.2020 00:00		672983-025
SW-44 (3.5')	S	09.17.2020 00:00		672983-026
SW-45 (3.5')	S	09.17.2020 00:00		672983-027
SW-46 (3.5')	S	09.17.2020 00:00		672983-028



## CASE NARRATIVE

**Client Name: Tetra Tech- Midland**

**Project Name: Goldeneye 18 Federal Com #1H (10.15.19)**

Project ID: 212c-md-02306  
Work Order Number(s): 672983

Report Date: 09.21.2020  
Date Received: 09.18.2020

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**Sample receipt non conformances and comments:**

None

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**Sample receipt non conformances and comments per sample:**

None



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-12 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-001 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	316	5.00	mg/kg	09.18.2020 21:08		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.18.2020 23:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.18.2020 23:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.18.2020 23:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.18.2020 23:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	09.18.2020 23:11	
o-Terphenyl	84-15-1	96	%	70-130	09.18.2020 23:11	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-12 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-001 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.2020 18:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.2020 18:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.2020 18:10	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.18.2020 18:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.2020 18:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.18.2020 18:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.18.2020 18:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	09.18.2020 18:10	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.2020 18:10	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-13 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-002 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	344	4.98	mg/kg	09.18.2020 21:14		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.19.2020 00:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.19.2020 00:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.19.2020 00:17	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.19.2020 00:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	09.19.2020 00:17	
o-Terphenyl	84-15-1	93	%	70-130	09.19.2020 00:17	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-13 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-002 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.18.2020 18:31	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.18.2020 18:31	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.18.2020 18:31	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.18.2020 18:31	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.18.2020 18:31	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.18.2020 18:31	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.18.2020 18:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.18.2020 18:31	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.18.2020 18:31	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-14 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-003 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	89.7	5.02	mg/kg	09.18.2020 21:19		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 00:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 00:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 00:39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 00:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	09.19.2020 00:39	
o-Terphenyl	84-15-1	94	%	70-130	09.19.2020 00:39	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

**Sample Id:** Bottom Hole-14 (2.5') **Matrix:** Soil **Date Received:** 09.18.2020 14:37  
**Lab Sample Id:** 672983-003 **Date Collected:** 09.17.2020 00:00  
**Analytical Method:** BTEX by EPA 8021B **Prep Method:** SW5035A  
**Tech:** KTL **% Moisture:**  
**Analyst:** KTL **Date Prep:** 09.18.2020 15:15 **Basis:** Wet Weight  
**Seq Number:** 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.18.2020 18:51	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.18.2020 18:51	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.18.2020 18:51	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.18.2020 18:51	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.18.2020 18:51	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.18.2020 18:51	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.18.2020 18:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.18.2020 18:51	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.18.2020 18:51	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-15 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-004 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	86.5	4.99	mg/kg	09.18.2020 21:35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.19.2020 01:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.19.2020 01:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.19.2020 01:01	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.19.2020 01:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.19.2020 01:01	
o-Terphenyl	84-15-1	92	%	70-130	09.19.2020 01:01	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

**Sample Id:** Bottom Hole-15 (2.5') **Matrix:** Soil **Date Received:** 09.18.2020 14:37  
**Lab Sample Id:** 672983-004 **Date Collected:** 09.17.2020 00:00  
**Analytical Method:** BTEX by EPA 8021B **Prep Method:** SW5035A  
**Tech:** KTL **% Moisture:**  
**Analyst:** KTL **Date Prep:** 09.18.2020 15:15 **Basis:** Wet Weight  
**Seq Number:** 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.18.2020 19:12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.18.2020 19:12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.18.2020 19:12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.18.2020 19:12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.18.2020 19:12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.18.2020 19:12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.18.2020 19:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.2020 19:12	
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.18.2020 19:12	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-16 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-005 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	74.2	4.97	mg/kg	09.18.2020 21:40		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 01:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 01:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 01:23	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 01:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	09.19.2020 01:23	
o-Terphenyl	84-15-1	97	%	70-130	09.19.2020 01:23	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-16 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-005 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.2020 19:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.2020 19:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.2020 19:32	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.18.2020 19:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.2020 19:32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.18.2020 19:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.18.2020 19:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.18.2020 19:32	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.2020 19:32	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-17 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-006 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	90.4	4.95	mg/kg	09.18.2020 21:45		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.19.2020 01:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.19.2020 01:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.19.2020 01:45	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.19.2020 01:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	09.19.2020 01:45	
o-Terphenyl	84-15-1	99	%	70-130	09.19.2020 01:45	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-17 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-006 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.18.2020 19:53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.18.2020 19:53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.18.2020 19:53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.18.2020 19:53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.18.2020 19:53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.18.2020 19:53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.18.2020 19:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.18.2020 19:53	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.2020 19:53	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-18 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-007 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	52.9	5.04	mg/kg	09.18.2020 21:51		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.19.2020 02:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.19.2020 02:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.19.2020 02:07	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.19.2020 02:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	09.19.2020 02:07	
o-Terphenyl	84-15-1	87	%	70-130	09.19.2020 02:07	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-18 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-007 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.2020 20:13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.2020 20:13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.2020 20:13	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.18.2020 20:13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.2020 20:13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.18.2020 20:13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.18.2020 20:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	09.18.2020 20:13	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.2020 20:13	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-19 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-008 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	51.8	5.02	mg/kg	09.18.2020 21:56		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 02:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 02:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 02:29	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 02:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	09.19.2020 02:29	
o-Terphenyl	84-15-1	87	%	70-130	09.19.2020 02:29	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-19 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-008 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.18.2020 20:34	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.18.2020 20:34	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.18.2020 20:34	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.18.2020 20:34	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.18.2020 20:34	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.18.2020 20:34	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.18.2020 20:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	09.18.2020 20:34	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.18.2020 20:34	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-27 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-009 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	378	4.96	mg/kg	09.18.2020 22:01		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 02:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 02:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 02:51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 02:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	09.19.2020 02:51	
o-Terphenyl	84-15-1	98	%	70-130	09.19.2020 02:51	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-27 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-009 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.18.2020 20:54	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.18.2020 20:54	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.18.2020 20:54	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.18.2020 20:54	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.18.2020 20:54	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.18.2020 20:54	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.18.2020 20:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.18.2020 20:54	
4-Bromofluorobenzene	460-00-4	108	%	70-130	09.18.2020 20:54	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-28 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-010 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	339	5.00	mg/kg	09.18.2020 22:17		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 03:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 03:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 03:13	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 03:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	09.19.2020 03:13	
o-Terphenyl	84-15-1	88	%	70-130	09.19.2020 03:13	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-28 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-010 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.18.2020 21:15	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.18.2020 21:15	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.18.2020 21:15	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.18.2020 21:15	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.18.2020 21:15	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.18.2020 21:15	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.18.2020 21:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.2020 21:15	
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.18.2020 21:15	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-29 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-011 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	337	4.99	mg/kg	09.18.2020 22:22		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 03:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 03:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 03:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 03:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	09.19.2020 03:57	
o-Terphenyl	84-15-1	90	%	70-130	09.19.2020 03:57	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-29 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-011 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.2020 22:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.2020 22:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.2020 22:38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.18.2020 22:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.2020 22:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.18.2020 22:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.18.2020 22:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.18.2020 22:38	
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.18.2020 22:38	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-30 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-012 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	370	5.04	mg/kg	09.18.2020 22:38		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.19.2020 04:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.19.2020 04:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.19.2020 04:19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.19.2020 04:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-130	09.19.2020 04:19	
o-Terphenyl	84-15-1	86	%	70-130	09.19.2020 04:19	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-30 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-012 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.2020 22:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.2020 22:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.2020 22:59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.18.2020 22:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.2020 22:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.18.2020 22:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.18.2020 22:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.18.2020 22:59	
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.18.2020 22:59	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-31 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-013 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	343	4.97	mg/kg	09.18.2020 22:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 04:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 04:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 04:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 04:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	09.19.2020 04:41	
o-Terphenyl	84-15-1	86	%	70-130	09.19.2020 04:41	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-31 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-013 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.18.2020 23:19	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.18.2020 23:19	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.18.2020 23:19	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.18.2020 23:19	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.18.2020 23:19	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.18.2020 23:19	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.18.2020 23:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.18.2020 23:19	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.18.2020 23:19	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-32 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-014 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	86.2	4.99	mg/kg	09.18.2020 22:49		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.19.2020 05:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.19.2020 05:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.19.2020 05:03	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.19.2020 05:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	09.19.2020 05:03	
o-Terphenyl	84-15-1	96	%	70-130	09.19.2020 05:03	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-32 (4')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-014 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.2020 23:40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.2020 23:40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.2020 23:40	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.18.2020 23:40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.2020 23:40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.18.2020 23:40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.18.2020 23:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.18.2020 23:40	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.18.2020 23:40	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-33 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-015 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	85.7	4.96	mg/kg	09.18.2020 22:54		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 05:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 05:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 05:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 05:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	09.19.2020 05:25	
o-Terphenyl	84-15-1	100	%	70-130	09.19.2020 05:25	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-33 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-015 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.19.2020 00:00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.19.2020 00:00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.19.2020 00:00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.19.2020 00:00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.19.2020 00:00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.19.2020 00:00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.19.2020 00:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.19.2020 00:00	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.19.2020 00:00	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-34 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-016 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	93.6	5.00	mg/kg	09.18.2020 22:59		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.19.2020 05:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.19.2020 05:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.19.2020 05:47	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.19.2020 05:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	09.19.2020 05:47	
o-Terphenyl	84-15-1	104	%	70-130	09.19.2020 05:47	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-34 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-016 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.19.2020 00:21	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.19.2020 00:21	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.19.2020 00:21	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	09.19.2020 00:21	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.19.2020 00:21	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.19.2020 00:21	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.19.2020 00:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.19.2020 00:21	
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.19.2020 00:21	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-35 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-017 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	82.7	5.00	mg/kg	09.18.2020 23:05		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 06:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 06:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 06:09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 06:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	09.19.2020 06:09	
o-Terphenyl	84-15-1	103	%	70-130	09.19.2020 06:09	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-35 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-017 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.19.2020 00:41	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.19.2020 00:41	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.19.2020 00:41	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.19.2020 00:41	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.19.2020 00:41	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.19.2020 00:41	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.19.2020 00:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.19.2020 00:41	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.19.2020 00:41	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-36 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-018 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 16:30 Basis: Wet Weight  
 Seq Number: 3137640

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	81.9	5.00	mg/kg	09.18.2020 23:10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 06:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 06:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 06:30	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 06:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	09.19.2020 06:30	
o-Terphenyl	84-15-1	101	%	70-130	09.19.2020 06:30	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-36 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-018 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.19.2020 01:02	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.19.2020 01:02	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.19.2020 01:02	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.19.2020 01:02	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.19.2020 01:02	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.19.2020 01:02	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.19.2020 01:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.19.2020 01:02	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.19.2020 01:02	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-37 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-019 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	84.1	4.95	mg/kg	09.18.2020 23:42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 06:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 06:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 06:53	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 06:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.19.2020 06:53	
o-Terphenyl	84-15-1	95	%	70-130	09.19.2020 06:53	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-37 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-019 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.19.2020 01:22	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.19.2020 01:22	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.19.2020 01:22	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	09.19.2020 01:22	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.19.2020 01:22	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.19.2020 01:22	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.19.2020 01:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.19.2020 01:22	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.19.2020 01:22	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-38 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-020 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	79.4	5.04	mg/kg	09.18.2020 23:57		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137626

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.19.2020 07:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.19.2020 07:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.19.2020 07:15	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.19.2020 07:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	09.19.2020 07:15	
o-Terphenyl	84-15-1	93	%	70-130	09.19.2020 07:15	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-38 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-020 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:15 Basis: Wet Weight  
 Seq Number: 3137580

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.19.2020 01:43	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.19.2020 01:43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.19.2020 01:43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.19.2020 01:43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.19.2020 01:43	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.19.2020 01:43	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.19.2020 01:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.19.2020 01:43	
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.19.2020 01:43	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-39 (2.5")** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-021 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	84.2	4.98	mg/kg	09.19.2020 00:03		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137624

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 04:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 04:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 04:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 04:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	09.19.2020 04:25	
o-Terphenyl	84-15-1	93	%	70-130	09.19.2020 04:25	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-39 (2.5")** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-021 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.18.2020 20:52	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.18.2020 20:52	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.18.2020 20:52	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.18.2020 20:52	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.18.2020 20:52	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.18.2020 20:52	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.18.2020 20:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.18.2020 20:52	
4-Bromofluorobenzene	460-00-4	94	%	70-130	09.18.2020 20:52	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-40 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-022 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	97.9	5.00	mg/kg	09.19.2020 00:08		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137624

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.19.2020 05:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.19.2020 05:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.19.2020 05:23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.19.2020 05:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	09.19.2020 05:23	
o-Terphenyl	84-15-1	87	%	70-130	09.19.2020 05:23	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-40 (2.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-022 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.18.2020 21:13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.18.2020 21:13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.18.2020 21:13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.18.2020 21:13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.18.2020 21:13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.18.2020 21:13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.18.2020 21:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.18.2020 21:13	
4-Bromofluorobenzene	460-00-4	108	%	70-130	09.18.2020 21:13	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-41 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-023 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	55.2	5.02	mg/kg	09.19.2020 00:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137624

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 05:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 05:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 05:42	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 05:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	09.19.2020 05:42	
o-Terphenyl	84-15-1	87	%	70-130	09.19.2020 05:42	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-41 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-023 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.18.2020 21:34	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.18.2020 21:34	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.18.2020 21:34	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.18.2020 21:34	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.18.2020 21:34	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.18.2020 21:34	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.18.2020 21:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.18.2020 21:34	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.18.2020 21:34	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-42 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-024 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	53.9	4.96	mg/kg	09.19.2020 21:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137624

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.19.2020 06:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.19.2020 06:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.19.2020 06:02	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.19.2020 06:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	09.19.2020 06:02	
o-Terphenyl	84-15-1	89	%	70-130	09.19.2020 06:02	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-42 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-024 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.18.2020 21:54	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.18.2020 21:54	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.18.2020 21:54	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.18.2020 21:54	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.18.2020 21:54	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.18.2020 21:54	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.18.2020 21:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.18.2020 21:54	
4-Bromofluorobenzene	460-00-4	108	%	70-130	09.18.2020 21:54	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-43 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-025 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.9	4.98	mg/kg	09.19.2020 21:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137624

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.19.2020 06:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.19.2020 06:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.19.2020 06:21	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.19.2020 06:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	09.19.2020 06:21	
o-Terphenyl	84-15-1	86	%	70-130	09.19.2020 06:21	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-43 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-025 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.18.2020 22:15	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.18.2020 22:15	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.18.2020 22:15	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	09.18.2020 22:15	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.18.2020 22:15	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.18.2020 22:15	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.18.2020 22:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	09.18.2020 22:15	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.18.2020 22:15	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-44 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-026 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.9	5.04	mg/kg	09.19.2020 21:55		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137624

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 06:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 06:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 06:40	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 06:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	09.19.2020 06:40	
o-Terphenyl	84-15-1	88	%	70-130	09.19.2020 06:40	



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**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-44 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-026 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.2020 22:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.2020 22:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.2020 22:35	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.18.2020 22:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.2020 22:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.18.2020 22:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.18.2020 22:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	70-130	09.18.2020 22:35	
1,4-Difluorobenzene	540-36-3	93	%	70-130	09.18.2020 22:35	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-45 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-027 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	48.9	4.96	mg/kg	09.19.2020 22:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137624

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.19.2020 06:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.19.2020 06:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.19.2020 06:59	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.19.2020 06:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	09.19.2020 06:59	
o-Terphenyl	84-15-1	103	%	70-130	09.19.2020 06:59	



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## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-45 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-027 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.18.2020 22:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.18.2020 22:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.18.2020 22:56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.18.2020 22:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.18.2020 22:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.18.2020 22:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.18.2020 22:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	123	%	70-130	09.18.2020 22:56	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.18.2020 22:56	



# Certificate of Analytical Results 672983

## Tetra Tech- Midland, Midland, TX Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-46 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-028 Date Collected: 09.17.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137641

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	47.7	4.97	mg/kg	09.19.2020 22:06		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.18.2020 17:00 Basis: Wet Weight  
 Seq Number: 3137624

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.19.2020 07:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.19.2020 07:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.19.2020 07:19	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.19.2020 07:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	09.19.2020 07:19	
o-Terphenyl	84-15-1	85	%	70-130	09.19.2020 07:19	



# Certificate of Analytical Results 672983

**Tetra Tech- Midland, Midland, TX**  
 Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-46 (3.5')** Matrix: Soil Date Received: 09.18.2020 14:37  
 Lab Sample Id: 672983-028 Date Collected: 09.17.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: KTL % Moisture:  
 Analyst: KTL Date Prep: 09.18.2020 15:00 Basis: Wet Weight  
 Seq Number: 3137579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.18.2020 23:16	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.18.2020 23:16	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.18.2020 23:16	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.18.2020 23:16	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.18.2020 23:16	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.18.2020 23:16	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.18.2020 23:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	123	%	70-130	09.18.2020 23:16	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.18.2020 23:16	





**Tetra Tech- Midland**  
Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137640

Matrix: Solid

Prep Method: E300P

Date Prep: 09.18.2020

MB Sample Id: 7711705-1-BLK

LCS Sample Id: 7711705-1-BKS

LCSD Sample Id: 7711705-1-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	256	102	254	102	90-110	1	20	mg/kg	09.18.2020 20:37	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137641

Matrix: Solid

Prep Method: E300P

Date Prep: 09.18.2020

MB Sample Id: 7711706-1-BLK

LCS Sample Id: 7711706-1-BKS

LCSD Sample Id: 7711706-1-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	252	101	254	102	90-110	1	20	mg/kg	09.18.2020 23:31	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137640

Matrix: Soil

Prep Method: E300P

Date Prep: 09.18.2020

Parent Sample Id: 672842-002

MS Sample Id: 672842-002 S

MSD Sample Id: 672842-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	790	250	1020	92	1040	100	90-110	2	20	mg/kg	09.18.2020 20:53	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137640

Matrix: Soil

Prep Method: E300P

Date Prep: 09.18.2020

Parent Sample Id: 672983-009

MS Sample Id: 672983-009 S

MSD Sample Id: 672983-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	378	248	623	99	627	100	90-110	1	20	mg/kg	09.18.2020 22:07	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137641

Matrix: Soil

Prep Method: E300P

Date Prep: 09.18.2020

Parent Sample Id: 672861-005

MS Sample Id: 672861-005 S

MSD Sample Id: 672861-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1130	250	1340	84	1340	84	90-110	0	20	mg/kg	09.19.2020 22:16	X

**Analytical Method: Chloride by EPA 300**

Seq Number: 3137641

Matrix: Soil

Prep Method: E300P

Date Prep: 09.18.2020

Parent Sample Id: 672983-019

MS Sample Id: 672983-019 S

MSD Sample Id: 672983-019 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	84.1	248	335	101	336	102	90-110	0	20	mg/kg	09.18.2020 23:47	

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

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

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

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



**Tetra Tech- Midland**  
Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137624

MB Sample Id: 7711700-1-BLK

Matrix: Solid

LCS Sample Id: 7711700-1-BKS

Prep Method: SW8015P

Date Prep: 09.18.2020

LCSD Sample Id: 7711700-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	916	92	1030	103	70-130	12	20	mg/kg	09.19.2020 03:47	
Diesel Range Organics (DRO)	<50.0	1000	953	95	1060	106	70-130	11	20	mg/kg	09.19.2020 03:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	75		92		100		70-130	%	09.19.2020 03:47
o-Terphenyl	85		95		103		70-130	%	09.19.2020 03:47

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137626

MB Sample Id: 7711703-1-BLK

Matrix: Solid

LCS Sample Id: 7711703-1-BKS

Prep Method: SW8015P

Date Prep: 09.18.2020

LCSD Sample Id: 7711703-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	890	89	852	85	70-130	4	20	mg/kg	09.18.2020 22:27	
Diesel Range Organics (DRO)	<50.0	1000	998	100	932	93	70-130	7	20	mg/kg	09.18.2020 22:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		98		89		70-130	%	09.18.2020 22:27
o-Terphenyl	94		86		80		70-130	%	09.18.2020 22:27

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137624

Matrix: Solid  
MB Sample Id: 7711700-1-BLK

Prep Method: SW8015P

Date Prep: 09.18.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.19.2020 03:28	

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137626

Matrix: Solid  
MB Sample Id: 7711703-1-BLK

Prep Method: SW8015P

Date Prep: 09.18.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.18.2020 22:05	

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

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

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

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



**Tetra Tech- Midland**  
Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137624  
Parent Sample Id: 672983-021

Matrix: Soil  
MS Sample Id: 672983-021 S

Prep Method: SW8015P  
Date Prep: 09.18.2020  
MSD Sample Id: 672983-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	893	89	906	91	70-130	1	20	mg/kg	09.19.2020 04:45	
Diesel Range Organics (DRO)	<49.9	998	921	92	933	93	70-130	1	20	mg/kg	09.19.2020 04:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		89		70-130	%	09.19.2020 04:45
o-Terphenyl	91		89		70-130	%	09.19.2020 04:45

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3137626  
Parent Sample Id: 672983-001

Matrix: Soil  
MS Sample Id: 672983-001 S

Prep Method: SW8015P  
Date Prep: 09.18.2020  
MSD Sample Id: 672983-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	863	87	868	87	70-130	1	20	mg/kg	09.18.2020 23:33	
Diesel Range Organics (DRO)	<49.9	997	950	95	948	95	70-130	0	20	mg/kg	09.18.2020 23:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		93		70-130	%	09.18.2020 23:33
o-Terphenyl	83		82		70-130	%	09.18.2020 23:33

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

Seq Number: 3137579  
MB Sample Id: 7711621-1-BLK

Matrix: Solid  
LCS Sample Id: 7711621-1-BKS

Prep Method: SW5035A  
Date Prep: 09.18.2020  
LCSD Sample Id: 7711621-1-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	0.0987	99	0.0933	93	70-130	6	35	mg/kg	09.18.2020 14:03	
Toluene	<0.00200	0.100	0.106	106	0.101	101	70-130	5	35	mg/kg	09.18.2020 14:03	
Ethylbenzene	<0.00200	0.100	0.114	114	0.108	108	70-130	5	35	mg/kg	09.18.2020 14:03	
m,p-Xylenes	<0.00400	0.200	0.228	114	0.213	107	70-130	7	35	mg/kg	09.18.2020 14:03	
o-Xylene	<0.00200	0.100	0.111	111	0.103	103	70-130	7	35	mg/kg	09.18.2020 14:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		98		70-130	%	09.18.2020 14:03
4-Bromofluorobenzene	72		113		108		70-130	%	09.18.2020 14:03

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

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

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

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



**Tetra Tech- Midland**  
Goldeneye 18 Federal Com #1H (10.15.19)

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

Seq Number: 3137580

MB Sample Id: 7711629-1-BLK

Matrix: Solid

LCS Sample Id: 7711629-1-BKS

Prep Method: SW5035A

Date Prep: 09.18.2020

LCSD Sample Id: 7711629-1-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	0.0910	91	0.0913	91	70-130	0	35	mg/kg	09.18.2020 15:48	
Toluene	<0.00200	0.100	0.0892	89	0.0892	89	70-130	0	35	mg/kg	09.18.2020 15:48	
Ethylbenzene	<0.00200	0.100	0.0908	91	0.0898	90	70-130	1	35	mg/kg	09.18.2020 15:48	
m,p-Xylenes	<0.00400	0.200	0.179	90	0.178	89	70-130	1	35	mg/kg	09.18.2020 15:48	
o-Xylene	<0.00200	0.100	0.0894	89	0.0890	89	70-130	0	35	mg/kg	09.18.2020 15:48	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		96		98		70-130	%	09.18.2020 15:48
4-Bromofluorobenzene	100		96		96		70-130	%	09.18.2020 15:48

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

Seq Number: 3137579

Parent Sample Id: 672970-001

Matrix: Soil

MS Sample Id: 672970-001 S

Prep Method: SW5035A

Date Prep: 09.18.2020

MSD Sample Id: 672970-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0784	78	0.0752	74	70-130	4	35	mg/kg	09.18.2020 14:44	
Toluene	0.00231	0.100	0.0669	65	0.0627	60	70-130	6	35	mg/kg	09.18.2020 14:44	X
Ethylbenzene	0.0142	0.100	0.0645	50	0.0608	46	70-130	6	35	mg/kg	09.18.2020 14:44	X
m,p-Xylenes	0.0300	0.200	0.0875	29	0.0802	25	70-130	9	35	mg/kg	09.18.2020 14:44	X
o-Xylene	0.0278	0.100	0.0704	43	0.0658	38	70-130	7	35	mg/kg	09.18.2020 14:44	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		103		70-130	%	09.18.2020 14:44
4-Bromofluorobenzene	108		105		70-130	%	09.18.2020 14:44

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

Seq Number: 3137580

Parent Sample Id: 672983-001

Matrix: Soil

MS Sample Id: 672983-001 S

Prep Method: SW5035A

Date Prep: 09.18.2020

MSD Sample Id: 672983-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0848	85	0.0855	86	70-130	1	35	mg/kg	09.18.2020 16:29	
Toluene	<0.00200	0.0998	0.0819	82	0.0818	82	70-130	0	35	mg/kg	09.18.2020 16:29	
Ethylbenzene	<0.00200	0.0998	0.0827	83	0.0827	83	70-130	0	35	mg/kg	09.18.2020 16:29	
m,p-Xylenes	<0.00399	0.200	0.162	81	0.163	82	70-130	1	35	mg/kg	09.18.2020 16:29	
o-Xylene	<0.00200	0.0998	0.0822	82	0.0823	82	70-130	0	35	mg/kg	09.18.2020 16:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		70-130	%	09.18.2020 16:29
4-Bromofluorobenzene	98		99		70-130	%	09.18.2020 16:29

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

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

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

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

Analysis Request of Custody Record



**Tetra Tech, Inc.**

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

072983

Client Name: COG Site Manager: Mike Carmona

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

Project Location: Eddy County, New Mexico Project #: 212C-MD-02306

Invoice to: Ike Tavares

Receiving Laboratory: Xenco Labs Sampler Signature: Devin D

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	Bottom Hole-12 (4')	Bottom Hole-13 (4')	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>		
	Bottom Hole-12 (4')	Bottom Hole-13 (4')	9/17/2020		X	X	X	X	1	N
	Bottom Hole-14 (2.5')	Bottom Hole-15 (2.5')	9/17/2020		X	X	X	X	1	N
	Bottom Hole-16 (2.5')	Bottom Hole-17 (2.5')	9/17/2020		X	X	X	X	1	N
	Bottom Hole-18 (3.5')	Bottom Hole-19 (3.5')	9/17/2020		X	X	X	X	1	N
	SW-27 (4')	SW-28 (4')	9/17/2020		X	X	X	X	1	N

Relinquished by: *[Signature]* Date: 9/18/20 Time: 1457

Received by: *[Signature]* Date: 9/18/20 Time: 1457

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

ANALYSIS REQUEST  
(Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

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

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

Hold

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: 20.0/3.1 +05

ORIGINAL COPY

Analysis Request of Chain of Custody Record



# Tetra Tech, Inc.

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

Client Name: COG Site Manager: Mike Carmona

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

Project Location: (county, state) Eddy County, New Mexico Project #: 212C-MD-02306

Invoice to: Ike Tavarez Receiving Laboratory: Xenco Labs Sampler Signature: Devin D

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	YEAR: 2020	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE		
	SW-29 (4')	9/17/2020		X				X	1	N
	SW-30 (4')	9/17/2020		X				X	1	N
	SW-31 (4')	9/17/2020		X				X	1	N
	SW-32 (4')	9/17/2020		X				X	1	N
	SW-33 (2.5')	9/17/2020		X				X	1	N
	SW-34 (2.5')	9/17/2020		X				X	1	N
	SW-35 (2.5')	9/17/2020		X				X	1	N
	SW-36 (2.5')	9/17/2020		X				X	1	N
	SW-37 (2.5')	9/17/2020		X				X	1	N
	SW-38 (2.5')	9/17/2020		X				X	1	N

Relinquished by: [Signature] Date: 9/18/2020 Time: 9:18  
 Received by: [Signature] Date: 9/18/2020 Time: 1437

ANALYSIS REQUEST  
(Circle or Specify Method No.)

1072083

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

LAB USE ONLY  
 Sample Temperature: 21.0/31  
 REMARKS:  
 STANDARD  
 RUSH: Same Day 24 hr 48 hr 72 hr  
 Rush Charges Authorized  
 Special Report Limits or TRRP Report

ORIGINAL COPY

Analysis Request of Custody Record



# Tetra Tech, Inc.

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

672983

Client Name: COG Site Manager: Mike Carmona

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

Project Location: Eddy County, New Mexico Project #: 212C-MD-02306

Invoice to: Ike Tavarez

Receiving Laboratory: Xenco Labs Sampler Signature: Devin D

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	SW	DEPTH	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>		
	SW-39	(2.5')	9/17/2020		X				1	N
	SW-40	(2.5')	9/17/2020		X				1	N
	SW-41	(3.5')	9/17/2020		X				1	N
	SW-42	(3.5')	9/17/2020		X				1	N
	SW-43	(3.5')	9/17/2020		X				1	N
	SW-44	(3.5')	9/17/2020		X				1	N
	SW-45	(3.5')	9/17/2020		X				1	N
	SW-46	(3.5')	9/17/2020		X				1	N

Relinquished by: Date: 9/18 Time: 1435

Received by: Date: 9/18/20 Time: 1435

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

### ANALYSIS REQUEST

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

LAB USE ONLY

Sample Temperature: 2.6/3.1

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Push Charges Authorized

Special Report Limits or TRRP Report

ORIGINAL COPY



# Certificate of Analysis Summary 673711

Tetra Tech- Midland, Midland, TX

Project Name: COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County NM

**Date Received in Lab:** Mon 09.28.2020 13:06  
**Report Date:** 09.30.2020 13:53  
**Project Manager:** Jessica Kramer

<b>Analysis Requested</b>	<b>Lab Id:</b>	673711-001	673711-002	673711-003	673711-004	673711-005	673711-006
	<b>Field Id:</b>	Bottom Hole-20 (2')	Bottom Hole-21 (2')	Bottom Hole-22 (2')	Bottom Hole-23 (2')	Bottom Hole-24 (2')	Bottom Hole-25 (2')
	<b>Depth:</b>						
	<b>Matrix:</b>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<b>Sampled:</b>	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00
<b>BTEX by EPA 8021B</b>	<b>Extracted:</b>	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00
	<b>Analyzed:</b>	09.28.2020 20:54	09.28.2020 21:15	09.28.2020 21:36	09.28.2020 23:17	09.28.2020 23:38	09.28.2020 23:59
	<b>Units/RL:</b>	mg/kg RL					
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
<b>Chloride by EPA 300</b>	<b>Extracted:</b>	09.28.2020 16:50	09.28.2020 16:50	09.28.2020 16:50	09.28.2020 16:50	09.28.2020 16:50	09.28.2020 17:10
	<b>Analyzed:</b>	09.28.2020 19:17	09.28.2020 19:22	09.28.2020 19:28	09.28.2020 19:34	09.28.2020 19:39	09.28.2020 20:12
	<b>Units/RL:</b>	mg/kg RL					
Chloride		19.2 4.99	20.5 4.97	18.1 5.00	19.1 5.00	23.0 5.00	22.5 5.00
<b>TPH by SW8015 Mod</b>	<b>Extracted:</b>	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30
	<b>Analyzed:</b>	09.28.2020 13:59	09.28.2020 15:05	09.28.2020 15:28	09.28.2020 15:51	09.28.2020 16:14	09.28.2020 16:36
	<b>Units/RL:</b>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9

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*Jessica Kramer*

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# Certificate of Analysis Summary 673711

Tetra Tech- Midland, Midland, TX

Project Name: COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County NM

**Date Received in Lab:** Mon 09.28.2020 13:06  
**Report Date:** 09.30.2020 13:53  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673711-007	673711-008	673711-009	673711-010	673711-011	673711-012
	<i>Field Id:</i>	Bottom Hole-26 (2')	Bottom Hole-27 (2')	Bottom Hole-28 (2')	Bottom Hole-29 (2')	Bottom Hole-30 (2')	Bottom Hole-31 (2')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00
	<i>Analyzed:</i>	09.29.2020 00:19	09.29.2020 00:40	09.29.2020 01:00	09.29.2020 01:21	09.29.2020 01:41	09.29.2020 02:02
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10
	<i>Analyzed:</i>	09.28.2020 20:29	09.28.2020 20:35	09.28.2020 20:40	09.28.2020 20:46	09.28.2020 21:02	09.28.2020 21:08
	<i>Units/RL:</i>	mg/kg RL					
Chloride		20.1 4.96	22.2 4.99	21.9 5.04	25.1 4.96	25.0 5.00	24.5 5.05
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30
	<i>Analyzed:</i>	09.28.2020 16:59	09.28.2020 17:21	09.28.2020 17:44	09.28.2020 18:07	09.28.2020 18:52	09.28.2020 19:15
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

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# Certificate of Analysis Summary 673711

Tetra Tech- Midland, Midland, TX

Project Name: COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County NM

**Date Received in Lab:** Mon 09.28.2020 13:06  
**Report Date:** 09.30.2020 13:53  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673711-013	673711-014	673711-015	673711-016	673711-017	673711-018
	<i>Field Id:</i>	Bottom Hole-32 (2')	Bottom Hole-33 (2.5')	Bottom Hole-34 (2.5')	Bottom Hole-35 (2.5')	Bottom Hole-36 (2.5')	Bottom Hole-37 (4')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00
	<i>Analyzed:</i>	09.29.2020 02:23	09.29.2020 06:04	09.29.2020 06:24	09.29.2020 06:45	09.29.2020 07:06	09.29.2020 07:27
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	0.00230 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00398 0.00398	<0.00402 0.00402	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00201 0.00201	0.00230 0.00199	<0.00200 0.00200
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10
	<i>Analyzed:</i>	09.28.2020 21:13	09.28.2020 21:19	09.28.2020 21:25	09.28.2020 21:30	09.28.2020 21:47	09.28.2020 21:52
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		22.2 4.97	20.7 5.00	21.6 5.03	21.3 5.00	23.1 5.05	2860 24.9
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 13:30
	<i>Analyzed:</i>	09.28.2020 19:38	09.28.2020 20:00	09.28.2020 20:23	09.28.2020 20:46	09.28.2020 21:08	09.28.2020 21:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<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	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0

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*Jessica Kramer*

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# Certificate of Analysis Summary 673711

Tetra Tech- Midland, Midland, TX

Project Name: COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County NM

**Date Received in Lab:** Mon 09.28.2020 13:06  
**Report Date:** 09.30.2020 13:53  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673711-019	673711-020	673711-021	673711-022	673711-023	673711-024
	<i>Field Id:</i>	Bottom Hole-38 (4')	Bottom Hole-39 (4')	Bottom Hole-40 (4')	Bottom Hole-41 (4')	Bottom Hole-42 (4')	Bottom Hole-43 (4')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00
	<i>Analyzed:</i>	09.29.2020 07:47	09.29.2020 08:08	09.29.2020 08:29	09.29.2020 08:50	09.29.2020 09:10	09.29.2020 10:50
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00401 0.00401	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10	09.28.2020 17:10
	<i>Analyzed:</i>	09.28.2020 22:09	09.28.2020 22:14	09.28.2020 22:20	09.28.2020 22:26	09.28.2020 22:31	09.28.2020 22:37
	<i>Units/RL:</i>	mg/kg RL					
Chloride		2030 25.0	2020 25.0	1960 25.0	1900 25.0	2350 25.2	820 4.98
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.28.2020 13:30	09.28.2020 13:30	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00
	<i>Analyzed:</i>	09.28.2020 21:54	09.28.2020 22:16	09.29.2020 00:07	09.29.2020 01:11	09.29.2020 01:33	09.29.2020 01:54
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

*Jessica Kramer*

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# Certificate of Analysis Summary 673711

Tetra Tech- Midland, Midland, TX

Project Name: COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County NM

**Date Received in Lab:** Mon 09.28.2020 13:06  
**Report Date:** 09.30.2020 13:53  
**Project Manager:** Jessica Kramer

Analysis Requested	Lab Id:	673711-025	673711-026	673711-027	673711-028	673711-029	673711-030
	Field Id:	Bottom Hole-44 (4')	Bottom Hole-45 (4')	Bottom Hole-46 (4')	Bottom Hole-47 (4')	Bottom Hole-48 (4')	Bottom Hole-49 (4')
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00
<b>BTEX by EPA 8021B</b>	Extracted:	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00
	Analyzed:	09.29.2020 11:10	09.29.2020 11:31	09.29.2020 11:52	09.29.2020 12:12	09.29.2020 12:33	09.29.2020 12:54
	Units/RL:	mg/kg RL					
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00403 0.00403	<0.00401 0.00401	<0.00402 0.00402	<0.00398 0.00398
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
<b>Chloride by EPA 300</b>	Extracted:	09.28.2020 17:10	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30
	Analyzed:	09.28.2020 22:42	09.29.2020 10:53	09.29.2020 11:12	09.29.2020 11:18	09.29.2020 11:24	09.29.2020 11:31
	Units/RL:	mg/kg RL					
Chloride		639 4.95	662 X 5.04	598 4.98	467 5.00	1830 25.1	2220 24.9
<b>TPH by SW8015 Mod</b>	Extracted:	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00
	Analyzed:	09.29.2020 02:16	09.29.2020 02:38	09.29.2020 03:00	09.29.2020 03:21	09.29.2020 03:43	09.29.2020 04:05
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8
Total TPH		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8

BRL - Below Reporting Limit

*Jessica Kramer*

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# Certificate of Analysis Summary 673711

Tetra Tech- Midland, Midland, TX

Project Name: COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County NM

**Date Received in Lab:** Mon 09.28.2020 13:06  
**Report Date:** 09.30.2020 13:53  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673711-031	673711-032	673711-033	673711-034	673711-035	673711-036
	<i>Field Id:</i>	SW-47 (2')	SW-48 (2')	SW-49 (2')	SW-50 (2')	SW-51 (2.5')	SW-52 (2.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.28.2020 15:00	09.28.2020 15:00	09.28.2020 15:00	09.29.2020 09:30	09.29.2020 09:30	09.29.2020 09:30
	<i>Analyzed:</i>	09.29.2020 13:14	09.29.2020 13:35	09.29.2020 13:56	09.29.2020 14:09	09.29.2020 18:36	09.29.2020 18:57
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00402 0.00402	<0.00401 0.00401	<0.00402 0.00402	<0.00403 0.00403	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00199 0.00199
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30
	<i>Analyzed:</i>	09.29.2020 11:50	09.29.2020 11:56	09.29.2020 12:02	09.29.2020 12:09	09.29.2020 12:15	09.29.2020 12:21
	<i>Units/RL:</i>	mg/kg RL					
Chloride		5.80 4.96	<5.02 5.02	<4.98 4.98	<4.99 4.99	<5.03 5.03	<4.98 4.98
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00
	<i>Analyzed:</i>	09.29.2020 04:48	09.29.2020 05:09	09.29.2020 05:31	09.29.2020 05:53	09.29.2020 06:15	09.29.2020 06:37
	<i>Units/RL:</i>	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	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.8 49.8
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	<49.8 49.8
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<49.8 49.8

BRL - Below Reporting Limit

*Jessica Kramer*

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# Certificate of Analysis Summary 673711

Tetra Tech- Midland, Midland, TX

Project Name: COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County NM

**Date Received in Lab:** Mon 09.28.2020 13:06  
**Report Date:** 09.30.2020 13:53  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673711-037	673711-038	673711-039	673711-040	673711-041	673711-042
	<i>Field Id:</i>	SW-53 (2.5')	SW-54 (2.5')	SW-55 (2.5')	SW-56 (2.5')	SW-57 (4')	SW-58 (4')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00	09.25.2020 00:00
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.29.2020 09:30	09.29.2020 09:30	09.29.2020 09:30	09.29.2020 09:30	09.29.2020 09:30	09.29.2020 13:30
	<i>Analyzed:</i>	09.29.2020 19:17	09.29.2020 19:38	09.29.2020 19:58	09.29.2020 20:19	09.29.2020 20:39	09.29.2020 19:48
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198
m,p-Xylenes		<0.00400 0.00400	<0.00401 0.00401	<0.00398 0.00398	<0.00399 0.00399	<0.00402 0.00402	<0.00397 0.00397
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30	09.29.2020 10:30
	<i>Analyzed:</i>	09.29.2020 12:41	09.29.2020 12:47	09.29.2020 13:06	09.29.2020 13:12	09.29.2020 13:19	09.29.2020 13:25
	<i>Units/RL:</i>	mg/kg RL					
Chloride		<5.03 5.03	<4.96 4.96	<4.99 4.99	<4.95 4.95	<5.04 5.04	<4.99 4.99
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00	09.28.2020 16:00
	<i>Analyzed:</i>	09.29.2020 06:59	09.29.2020 07:22	09.29.2020 07:44	09.29.2020 08:05	09.29.2020 04:48	09.29.2020 05:09
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.8 49.8
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<49.9 49.9	<49.8 49.8

BRL - Below Reporting Limit

*Jessica Kramer*

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# Certificate of Analysis Summary 673711

Tetra Tech- Midland, Midland, TX

Project Name: COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Project Id:** 212C-MD-02306  
**Contact:** Mike Carmona  
**Project Location:** Eddy County NM

**Date Received in Lab:** Mon 09.28.2020 13:06  
**Report Date:** 09.30.2020 13:53  
**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	673711-043	673711-044				
	<i>Field Id:</i>	SW-59 (4)	SW-60 (4)				
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL				
	<i>Sampled:</i>	09.25.2020 00:00	09.25.2020 00:00				
<b>BTEX by EPA 8021B</b>	<i>Extracted:</i>	09.29.2020 13:30	09.29.2020 13:30				
	<i>Analyzed:</i>	09.29.2020 20:09	09.29.2020 20:30				
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Benzene		<0.00201 0.00201	<0.00201 0.00201				
Toluene		<0.00201 0.00201	<0.00201 0.00201				
Ethylbenzene		<0.00201 0.00201	<0.00201 0.00201				
m,p-Xylenes		<0.00402 0.00402	<0.00402 0.00402				
o-Xylene		<0.00201 0.00201	<0.00201 0.00201				
Total Xylenes		<0.00201 0.00201	<0.00201 0.00201				
Total BTEX		<0.00201 0.00201	<0.00201 0.00201				
<b>Chloride by EPA 300</b>	<i>Extracted:</i>	09.29.2020 10:45	09.29.2020 10:45				
	<i>Analyzed:</i>	09.29.2020 14:20	09.29.2020 14:37				
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Chloride		5.31 5.05	<4.98 4.98				
<b>TPH by SW8015 Mod</b>	<i>Extracted:</i>	09.28.2020 16:00	09.28.2020 16:00				
	<i>Analyzed:</i>	09.29.2020 05:31	09.29.2020 05:53				
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0				
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0				
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0				
Total TPH		<50.0 50.0	<50.0 50.0				

BRL - Below Reporting Limit

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*Jessica Kramer*



# Analytical Report 673711

for

## Tetra Tech- Midland

Project Manager: Mike Carmona

COG - Goldeneye 18 Federal Com #1H (10.15.19)

212C-MD-02306

09.30.2020

Collected By: Client



1211 W. Florida Ave  
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)  
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)  
Xenco-Carlsbad (LELAP): Louisiana (05092)  
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-8)  
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.30.2020

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **673711**

**COG - Goldeneye 18 Federal Com #1H (10.15.19)**

Project Address: Eddy County 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 Eurofins Xenco, LLC Report Number(s) 673711. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 673711 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

**Jessica Kramer**

Project Manager

*A Small Business and Minority Company*

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# Sample Cross Reference 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Bottom Hole-20 (2')	S	09.25.2020 00:00		673711-001
Bottom Hole-21 (2')	S	09.25.2020 00:00		673711-002
Bottom Hole-22 (2')	S	09.25.2020 00:00		673711-003
Bottom Hole-23 (2')	S	09.25.2020 00:00		673711-004
Bottom Hole-24 (2')	S	09.25.2020 00:00		673711-005
Bottom Hole-25 (2')	S	09.25.2020 00:00		673711-006
Bottom Hole-26 (2')	S	09.25.2020 00:00		673711-007
Bottom Hole-27 (2')	S	09.25.2020 00:00		673711-008
Bottom Hole-28 (2')	S	09.25.2020 00:00		673711-009
Bottom Hole-29 (2')	S	09.25.2020 00:00		673711-010
Bottom Hole-30 (2')	S	09.25.2020 00:00		673711-011
Bottom Hole-31 (2')	S	09.25.2020 00:00		673711-012
Bottom Hole-32 (2')	S	09.25.2020 00:00		673711-013
Bottom Hole-33 (2.5')	S	09.25.2020 00:00		673711-014
Bottom Hole-34 (2.5')	S	09.25.2020 00:00		673711-015
Bottom Hole-35 (2.5')	S	09.25.2020 00:00		673711-016
Bottom Hole-36 (2.5')	S	09.25.2020 00:00		673711-017
Bottom Hole-37 (4')	S	09.25.2020 00:00		673711-018
Bottom Hole-38 (4')	S	09.25.2020 00:00		673711-019
Bottom Hole-39 (4')	S	09.25.2020 00:00		673711-020
Bottom Hole-40 (4')	S	09.25.2020 00:00		673711-021
Bottom Hole-41 (4')	S	09.25.2020 00:00		673711-022
Bottom Hole-42 (4')	S	09.25.2020 00:00		673711-023
Bottom Hole-43 (4')	S	09.25.2020 00:00		673711-024
Bottom Hole-44 (4')	S	09.25.2020 00:00		673711-025
Bottom Hole-45 (4')	S	09.25.2020 00:00		673711-026
Bottom Hole-46 (4')	S	09.25.2020 00:00		673711-027
Bottom Hole-47 (4')	S	09.25.2020 00:00		673711-028
Bottom Hole-48 (4')	S	09.25.2020 00:00		673711-029
Bottom Hole-49 (4')	S	09.25.2020 00:00		673711-030
SW-47 (2')	S	09.25.2020 00:00		673711-031
SW-48 (2')	S	09.25.2020 00:00		673711-032
SW-49 (2')	S	09.25.2020 00:00		673711-033
SW-50 (2')	S	09.25.2020 00:00		673711-034
SW-51 (2.5')	S	09.25.2020 00:00		673711-035
SW-52 (2.5')	S	09.25.2020 00:00		673711-036
SW-53 (2.5')	S	09.25.2020 00:00		673711-037
SW-54 (2.5')	S	09.25.2020 00:00		673711-038
SW-55 (2.5')	S	09.25.2020 00:00		673711-039
SW-56 (2.5')	S	09.25.2020 00:00		673711-040
SW-57 (4')	S	09.25.2020 00:00		673711-041
SW-58 (4')	S	09.25.2020 00:00		673711-042
SW-59 (4')	S	09.25.2020 00:00		673711-043



# Sample Cross Reference 673711

**Tetra Tech- Midland, Midland, TX**

COG - Goldeneye 18 Federal Com #1H (10.15.19)

SW-60 (4')

S

09.25.2020 00:00

673711-044



# CASE NARRATIVE

**Client Name: Tetra Tech- Midland**

**Project Name: COG - Goldeneye 18 Federal Com #1H (10.15.19)**

Project ID: 212C-MD-02306  
Work Order Number(s): 673711

Report Date: 09.30.2020  
Date Received: 09.28.2020

**Sample receipt non conformances and comments:**

**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3138362 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 673711-001.

Batch: LBA-3138443 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 673765-001 SD.

Batch: LBA-3138445 Chloride by EPA 300

Lab Sample ID 673711-036 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 673711-026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038, -039, -040, -041, -042.

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



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-20 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-001 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 16:50 Basis: Wet Weight  
 Seq Number: 3138336

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.2	4.99	mg/kg	09.28.2020 19:17		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 13:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 13:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 13:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 13:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	65	%	70-130	09.28.2020 13:59	**
o-Terphenyl	84-15-1	70	%	70-130	09.28.2020 13:59	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-20 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-001 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.28.2020 20:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.28.2020 20:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.28.2020 20:54	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.28.2020 20:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.28.2020 20:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.28.2020 20:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.28.2020 20:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.28.2020 20:54	
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.28.2020 20:54	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-21 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-002 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 16:50 Basis: Wet Weight  
 Seq Number: 3138336

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.5	4.97	mg/kg	09.28.2020 19:22		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.28.2020 15:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.28.2020 15:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.28.2020 15:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.28.2020 15:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.28.2020 15:05	
o-Terphenyl	84-15-1	90	%	70-130	09.28.2020 15:05	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-21 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-002 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.28.2020 21:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.28.2020 21:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.28.2020 21:15	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.28.2020 21:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.28.2020 21:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.28.2020 21:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.28.2020 21:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.28.2020 21:15	
4-Bromofluorobenzene	460-00-4	109	%	70-130	09.28.2020 21:15	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-22 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-003 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 16:50 Basis: Wet Weight  
 Seq Number: 3138336

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.1	5.00	mg/kg	09.28.2020 19:28		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 15:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 15:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 15:28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 15:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	09.28.2020 15:28	
o-Terphenyl	84-15-1	81	%	70-130	09.28.2020 15:28	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-22 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-003 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.28.2020 21:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.28.2020 21:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.28.2020 21:36	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.28.2020 21:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.28.2020 21:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.28.2020 21:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.28.2020 21:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.28.2020 21:36	
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.28.2020 21:36	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-23 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-004 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 16:50 Basis: Wet Weight  
 Seq Number: 3138336

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.1	5.00	mg/kg	09.28.2020 19:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 15:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 15:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 15:51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 15:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	09.28.2020 15:51	
o-Terphenyl	84-15-1	86	%	70-130	09.28.2020 15:51	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-23 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-004 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.28.2020 23:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.28.2020 23:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.28.2020 23:17	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.28.2020 23:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.28.2020 23:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.28.2020 23:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.28.2020 23:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.28.2020 23:17	
1,4-Difluorobenzene	540-36-3	88	%	70-130	09.28.2020 23:17	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-24 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-005 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 16:50 Basis: Wet Weight  
 Seq Number: 3138336

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.0	5.00	mg/kg	09.28.2020 19:39		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.28.2020 16:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.28.2020 16:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.28.2020 16:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.28.2020 16:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	09.28.2020 16:14	
o-Terphenyl	84-15-1	89	%	70-130	09.28.2020 16:14	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-24 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-005 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.28.2020 23:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.28.2020 23:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.28.2020 23:38	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.28.2020 23:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.28.2020 23:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.28.2020 23:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.28.2020 23:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.28.2020 23:38	
4-Bromofluorobenzene	460-00-4	95	%	70-130	09.28.2020 23:38	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-25 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-006 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.5	5.00	mg/kg	09.28.2020 20:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.28.2020 16:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.28.2020 16:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.28.2020 16:36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.28.2020 16:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	09.28.2020 16:36	
o-Terphenyl	84-15-1	81	%	70-130	09.28.2020 16:36	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-25 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-006 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.28.2020 23:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.28.2020 23:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.28.2020 23:59	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.28.2020 23:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.28.2020 23:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.28.2020 23:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.28.2020 23:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.28.2020 23:59	
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.28.2020 23:59	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-26 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-007 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.1	4.96	mg/kg	09.28.2020 20:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.28.2020 16:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.28.2020 16:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.28.2020 16:59	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.28.2020 16:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	09.28.2020 16:59	
o-Terphenyl	84-15-1	89	%	70-130	09.28.2020 16:59	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-26 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-007 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 00:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 00:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 00:19	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.29.2020 00:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 00:19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 00:19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 00:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.29.2020 00:19	
4-Bromofluorobenzene	460-00-4	108	%	70-130	09.29.2020 00:19	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-27 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-008 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.2	4.99	mg/kg	09.28.2020 20:35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 17:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 17:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 17:21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 17:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	09.28.2020 17:21	
o-Terphenyl	84-15-1	97	%	70-130	09.28.2020 17:21	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-27 (2')**

Matrix: Soil

Date Received: 09.28.2020 13:06

Lab Sample Id: 673711-008

Date Collected: 09.25.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: ALJ

Date Prep: 09.28.2020 15:00

Basis: Wet Weight

Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 00:40	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 00:40	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 00:40	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.29.2020 00:40	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 00:40	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 00:40	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 00:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.29.2020 00:40	
4-Bromofluorobenzene	460-00-4	101	%	70-130	09.29.2020 00:40	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-28 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-009 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.9	5.04	mg/kg	09.28.2020 20:40		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 17:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 17:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 17:44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 17:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	09.28.2020 17:44	
o-Terphenyl	84-15-1	88	%	70-130	09.28.2020 17:44	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-28 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-009 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 01:00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 01:00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 01:00	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.29.2020 01:00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 01:00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 01:00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 01:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	09.29.2020 01:00	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.29.2020 01:00	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-29 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-010 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.1	4.96	mg/kg	09.28.2020 20:46		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.28.2020 18:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.28.2020 18:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.28.2020 18:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.28.2020 18:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	09.28.2020 18:07	
o-Terphenyl	84-15-1	86	%	70-130	09.28.2020 18:07	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-29 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-010 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 01:21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 01:21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 01:21	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.29.2020 01:21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 01:21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 01:21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 01:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.29.2020 01:21	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.29.2020 01:21	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-30 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-011 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.0	5.00	mg/kg	09.28.2020 21:02		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.28.2020 18:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.28.2020 18:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.28.2020 18:52	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.28.2020 18:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	09.28.2020 18:52	
o-Terphenyl	84-15-1	85	%	70-130	09.28.2020 18:52	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-30 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-011 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 01:41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 01:41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 01:41	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.29.2020 01:41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 01:41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 01:41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 01:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.29.2020 01:41	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.29.2020 01:41	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-31 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-012 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24.5	5.05	mg/kg	09.28.2020 21:08		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 19:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 19:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 19:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 19:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.28.2020 19:15	
o-Terphenyl	84-15-1	94	%	70-130	09.28.2020 19:15	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-31 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-012 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 02:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 02:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 02:02	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.29.2020 02:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 02:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 02:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 02:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.29.2020 02:02	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.29.2020 02:02	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-32 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-013 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.2	4.97	mg/kg	09.28.2020 21:13		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 19:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 19:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 19:38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 19:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	09.28.2020 19:38	
o-Terphenyl	84-15-1	122	%	70-130	09.28.2020 19:38	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-32 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-013 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138317

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 02:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 02:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 02:23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.29.2020 02:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 02:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 02:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 02:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.29.2020 02:23	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.29.2020 02:23	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-33 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-014 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.7	5.00	mg/kg	09.28.2020 21:19		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 20:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 20:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 20:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 20:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	09.28.2020 20:00	
o-Terphenyl	84-15-1	95	%	70-130	09.28.2020 20:00	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-33 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-014 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.29.2020 06:04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.29.2020 06:04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.29.2020 06:04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.29.2020 06:04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.29.2020 06:04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.29.2020 06:04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.29.2020 06:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	09.29.2020 06:04	
1,4-Difluorobenzene	540-36-3	93	%	70-130	09.29.2020 06:04	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-34 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-015 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.6	5.03	mg/kg	09.28.2020 21:25		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.28.2020 20:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.28.2020 20:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.28.2020 20:23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.28.2020 20:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	09.28.2020 20:23	
o-Terphenyl	84-15-1	80	%	70-130	09.28.2020 20:23	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-34 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-015 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 06:24	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 06:24	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 06:24	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 06:24	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 06:24	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 06:24	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 06:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	09.29.2020 06:24	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.29.2020 06:24	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-35 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-016 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.3	5.00	mg/kg	09.28.2020 21:30		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.28.2020 20:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.28.2020 20:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.28.2020 20:46	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.28.2020 20:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	09.28.2020 20:46	
o-Terphenyl	84-15-1	115	%	70-130	09.28.2020 20:46	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-35 (2.5')**

Matrix: Soil

Date Received: 09.28.2020 13:06

Lab Sample Id: 673711-016

Date Collected: 09.25.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: ALJ

Date Prep: 09.28.2020 15:00

Basis: Wet Weight

Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 06:45	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 06:45	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 06:45	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 06:45	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 06:45	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 06:45	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 06:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	09.29.2020 06:45	
1,4-Difluorobenzene	540-36-3	99	%	70-130	09.29.2020 06:45	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-36 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-017 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.1	5.05	mg/kg	09.28.2020 21:47		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 21:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 21:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 21:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 21:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	09.28.2020 21:08	
o-Terphenyl	84-15-1	119	%	70-130	09.28.2020 21:08	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-36 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-017 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.29.2020 07:06	U	1
<b>Toluene</b>	108-88-3	<b>0.00230</b>	0.00199	mg/kg	09.29.2020 07:06		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.29.2020 07:06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.29.2020 07:06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.29.2020 07:06	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.29.2020 07:06	U	1
<b>Total BTEX</b>		<b>0.00230</b>	0.00199	mg/kg	09.29.2020 07:06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.29.2020 07:06	
1,4-Difluorobenzene	540-36-3	107	%	70-130	09.29.2020 07:06	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-37 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-018 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2860	24.9	mg/kg	09.28.2020 21:52		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.28.2020 21:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.28.2020 21:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.28.2020 21:31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.28.2020 21:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	09.28.2020 21:31	
o-Terphenyl	84-15-1	85	%	70-130	09.28.2020 21:31	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-37 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-018 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 07:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 07:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 07:27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.29.2020 07:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 07:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 07:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 07:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	09.29.2020 07:27	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.29.2020 07:27	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-38 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-019 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2030	25.0	mg/kg	09.28.2020 22:09		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.28.2020 21:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.28.2020 21:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.28.2020 21:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.28.2020 21:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	09.28.2020 21:54	
o-Terphenyl	84-15-1	96	%	70-130	09.28.2020 21:54	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-38 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-019 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 07:47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 07:47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 07:47	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.29.2020 07:47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 07:47	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 07:47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 07:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.29.2020 07:47	
4-Bromofluorobenzene	460-00-4	112	%	70-130	09.29.2020 07:47	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-39 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-020 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2020	25.0	mg/kg	09.28.2020 22:14		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138362

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.28.2020 22:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.28.2020 22:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.28.2020 22:16	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.28.2020 22:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	09.28.2020 22:16	
o-Terphenyl	84-15-1	80	%	70-130	09.28.2020 22:16	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-39 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-020 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 08:08	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 08:08	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 08:08	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 08:08	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 08:08	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 08:08	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 08:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.29.2020 08:08	
4-Bromofluorobenzene	460-00-4	119	%	70-130	09.29.2020 08:08	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-40 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-021 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1960	25.0	mg/kg	09.28.2020 22:20		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 00:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 00:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 00:07	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 00:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	09.29.2020 00:07	
o-Terphenyl	84-15-1	95	%	70-130	09.29.2020 00:07	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-40 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-021 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.29.2020 08:29	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.29.2020 08:29	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.29.2020 08:29	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.29.2020 08:29	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.29.2020 08:29	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.29.2020 08:29	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.29.2020 08:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.29.2020 08:29	
1,4-Difluorobenzene	540-36-3	95	%	70-130	09.29.2020 08:29	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-41 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-022 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1900	25.0	mg/kg	09.28.2020 22:26		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.29.2020 01:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.29.2020 01:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.29.2020 01:11	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.29.2020 01:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	09.29.2020 01:11	
o-Terphenyl	84-15-1	98	%	70-130	09.29.2020 01:11	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-41 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-022 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 08:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 08:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 08:50	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.29.2020 08:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 08:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 08:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 08:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	70-130	09.29.2020 08:50	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.29.2020 08:50	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-42 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-023 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2350	25.2	mg/kg	09.28.2020 22:31		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 01:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 01:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 01:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 01:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	09.29.2020 01:33	
o-Terphenyl	84-15-1	100	%	70-130	09.29.2020 01:33	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-42 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-023 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 09:10	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 09:10	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 09:10	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 09:10	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 09:10	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 09:10	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 09:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	123	%	70-130	09.29.2020 09:10	
1,4-Difluorobenzene	540-36-3	108	%	70-130	09.29.2020 09:10	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-43 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-024 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	820	4.98	mg/kg	09.28.2020 22:37		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 01:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 01:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 01:54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 01:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	09.29.2020 01:54	
o-Terphenyl	84-15-1	98	%	70-130	09.29.2020 01:54	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-43 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-024 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 10:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 10:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 10:50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.29.2020 10:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 10:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 10:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 10:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	09.29.2020 10:50	
1,4-Difluorobenzene	540-36-3	91	%	70-130	09.29.2020 10:50	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-44 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-025 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.28.2020 17:10 Basis: Wet Weight  
 Seq Number: 3138339

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	639	4.95	mg/kg	09.28.2020 22:42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.29.2020 02:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.29.2020 02:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.29.2020 02:16	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.29.2020 02:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	09.29.2020 02:16	
o-Terphenyl	84-15-1	98	%	70-130	09.29.2020 02:16	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-44 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-025 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.29.2020 11:10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.29.2020 11:10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.29.2020 11:10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.29.2020 11:10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.29.2020 11:10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.29.2020 11:10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.29.2020 11:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.29.2020 11:10	
4-Bromofluorobenzene	460-00-4	108	%	70-130	09.29.2020 11:10	



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## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-45 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-026 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	662	5.04	mg/kg	09.29.2020 10:53	X	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 02:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 02:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 02:38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 02:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	09.29.2020 02:38	
o-Terphenyl	84-15-1	98	%	70-130	09.29.2020 02:38	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-45 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-026 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 11:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 11:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 11:31	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.29.2020 11:31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 11:31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 11:31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 11:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	09.29.2020 11:31	
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.29.2020 11:31	



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## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-46 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-027 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	598	4.98	mg/kg	09.29.2020 11:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.29.2020 03:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.29.2020 03:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.29.2020 03:00	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.29.2020 03:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	09.29.2020 03:00	
o-Terphenyl	84-15-1	101	%	70-130	09.29.2020 03:00	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-46 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-027 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.29.2020 11:52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.29.2020 11:52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.29.2020 11:52	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.29.2020 11:52	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.29.2020 11:52	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.29.2020 11:52	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.29.2020 11:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	09.29.2020 11:52	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.29.2020 11:52	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-47 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-028 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	467	5.00	mg/kg	09.29.2020 11:18		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 03:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 03:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 03:21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 03:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	09.29.2020 03:21	
o-Terphenyl	84-15-1	97	%	70-130	09.29.2020 03:21	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-47 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-028 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 12:12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 12:12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 12:12	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.29.2020 12:12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 12:12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 12:12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 12:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	09.29.2020 12:12	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.29.2020 12:12	



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## Tetra Tech- Midland, Midland, TX COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-48 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-029 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1830	25.1	mg/kg	09.29.2020 11:24		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.29.2020 03:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.29.2020 03:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.29.2020 03:43	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.29.2020 03:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.29.2020 03:43	
o-Terphenyl	84-15-1	95	%	70-130	09.29.2020 03:43	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-48 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-029 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 12:33	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 12:33	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 12:33	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 12:33	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 12:33	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 12:33	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 12:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.29.2020 12:33	
4-Bromofluorobenzene	460-00-4	124	%	70-130	09.29.2020 12:33	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-49 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-030 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2220	24.9	mg/kg	09.29.2020 11:31		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.29.2020 04:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.29.2020 04:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.29.2020 04:05	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.29.2020 04:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	09.29.2020 04:05	
o-Terphenyl	84-15-1	98	%	70-130	09.29.2020 04:05	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **Bottom Hole-49 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-030 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.29.2020 12:54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.29.2020 12:54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.29.2020 12:54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.29.2020 12:54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.29.2020 12:54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.29.2020 12:54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.29.2020 12:54	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	126	%	70-130	09.29.2020 12:54		
1,4-Difluorobenzene	540-36-3	108	%	70-130	09.29.2020 12:54		



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-47 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-031 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.80	4.96	mg/kg	09.29.2020 11:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 04:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 04:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 04:48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 04:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.29.2020 04:48	
o-Terphenyl	84-15-1	99	%	70-130	09.29.2020 04:48	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-47 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-031 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 13:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 13:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 13:14	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.29.2020 13:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 13:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 13:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 13:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	127	%	70-130	09.29.2020 13:14	
1,4-Difluorobenzene	540-36-3	106	%	70-130	09.29.2020 13:14	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-48 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-032 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.02	5.02	mg/kg	09.29.2020 11:56	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 05:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 05:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 05:09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 05:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	09.29.2020 05:09	
o-Terphenyl	84-15-1	93	%	70-130	09.29.2020 05:09	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-48 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-032 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 13:35	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 13:35	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 13:35	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 13:35	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 13:35	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 13:35	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 13:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.29.2020 13:35	
4-Bromofluorobenzene	460-00-4	129	%	70-130	09.29.2020 13:35	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-49 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-033 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	09.29.2020 12:02	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.29.2020 05:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.29.2020 05:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.29.2020 05:31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.29.2020 05:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	09.29.2020 05:31	
o-Terphenyl	84-15-1	83	%	70-130	09.29.2020 05:31	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-49 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-033 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: ALJ Date Prep: 09.28.2020 15:00 Basis: Wet Weight  
 Seq Number: 3138432

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 13:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 13:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 13:56	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.29.2020 13:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 13:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 13:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 13:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	127	%	70-130	09.29.2020 13:56	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.29.2020 13:56	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-50 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-034 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	09.29.2020 12:09	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.29.2020 05:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.29.2020 05:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.29.2020 05:53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.29.2020 05:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	09.29.2020 05:53	
o-Terphenyl	84-15-1	94	%	70-130	09.29.2020 05:53	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-50 (2')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-034 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: ALJ % Moisture:  
 Analyst: ALJ Date Prep: 09.29.2020 09:30 Basis: Wet Weight  
 Seq Number: 3138435

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 14:09	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 14:09	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 14:09	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 14:09	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 14:09	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 14:09	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 14:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.29.2020 14:09	
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.29.2020 14:09	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-51 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-035 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	09.29.2020 12:15	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 06:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 06:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 06:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 06:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	09.29.2020 06:15	
o-Terphenyl	84-15-1	92	%	70-130	09.29.2020 06:15	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-51 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-035 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: ALJ % Moisture:  
 Analyst: ALJ Date Prep: 09.29.2020 09:30 Basis: Wet Weight  
 Seq Number: 3138435

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.29.2020 18:36	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.29.2020 18:36	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.29.2020 18:36	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.29.2020 18:36	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.29.2020 18:36	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.29.2020 18:36	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.29.2020 18:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	09.29.2020 18:36	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.29.2020 18:36	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-52 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-036 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	09.29.2020 12:21	UX	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.29.2020 06:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.29.2020 06:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.29.2020 06:37	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.29.2020 06:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	09.29.2020 06:37	
o-Terphenyl	84-15-1	87	%	70-130	09.29.2020 06:37	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-52 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-036 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: ALJ % Moisture:  
 Analyst: ALJ Date Prep: 09.29.2020 09:30 Basis: Wet Weight  
 Seq Number: 3138435

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.29.2020 18:57	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.29.2020 18:57	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.29.2020 18:57	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.29.2020 18:57	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.29.2020 18:57	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.29.2020 18:57	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.29.2020 18:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.29.2020 18:57	
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.29.2020 18:57	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-53 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-037 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	09.29.2020 12:41	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 06:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 06:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 06:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 06:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	09.29.2020 06:59	
o-Terphenyl	84-15-1	88	%	70-130	09.29.2020 06:59	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-53 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-037 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: ALJ % Moisture:  
 Analyst: ALJ Date Prep: 09.29.2020 09:30 Basis: Wet Weight  
 Seq Number: 3138435

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 19:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 19:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 19:17	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.29.2020 19:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 19:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 19:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 19:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.29.2020 19:17	
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.29.2020 19:17	



# Certificate of Analytical Results 673711

## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-54 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-038 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	09.29.2020 12:47	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 07:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 07:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 07:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 07:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-130	09.29.2020 07:22	
o-Terphenyl	84-15-1	94	%	70-130	09.29.2020 07:22	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-54 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-038 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: ALJ % Moisture:  
 Analyst: ALJ Date Prep: 09.29.2020 09:30 Basis: Wet Weight  
 Seq Number: 3138435

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 19:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 19:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 19:38	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.29.2020 19:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 19:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 19:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 19:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.29.2020 19:38	
4-Bromofluorobenzene	460-00-4	105	%	70-130	09.29.2020 19:38	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-55 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-039 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	09.29.2020 13:06	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.29.2020 07:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.29.2020 07:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.29.2020 07:44	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.29.2020 07:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	09.29.2020 07:44	
o-Terphenyl	84-15-1	88	%	70-130	09.29.2020 07:44	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-55 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-039 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: ALJ % Moisture:  
 Analyst: ALJ Date Prep: 09.29.2020 09:30 Basis: Wet Weight  
 Seq Number: 3138435

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.29.2020 19:58	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.29.2020 19:58	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.29.2020 19:58	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.29.2020 19:58	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.29.2020 19:58	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.29.2020 19:58	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.29.2020 19:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.29.2020 19:58	
4-Bromofluorobenzene	460-00-4	102	%	70-130	09.29.2020 19:58	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-56 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-040 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	09.29.2020 13:12	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138363

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.29.2020 08:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.29.2020 08:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.29.2020 08:05	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.29.2020 08:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.29.2020 08:05	
o-Terphenyl	84-15-1	97	%	70-130	09.29.2020 08:05	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-56 (2.5')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-040 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: ALJ % Moisture:  
 Analyst: ALJ Date Prep: 09.29.2020 09:30 Basis: Wet Weight  
 Seq Number: 3138435

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.29.2020 20:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.29.2020 20:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.29.2020 20:19	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.29.2020 20:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.29.2020 20:19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.29.2020 20:19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.29.2020 20:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.29.2020 20:19	
4-Bromofluorobenzene	460-00-4	104	%	70-130	09.29.2020 20:19	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-57 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-041 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	09.29.2020 13:19	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138367

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.29.2020 04:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.29.2020 04:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.29.2020 04:48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.29.2020 04:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	09.29.2020 04:48	
o-Terphenyl	84-15-1	81	%	70-130	09.29.2020 04:48	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-57 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-041 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: ALJ % Moisture:  
 Analyst: ALJ Date Prep: 09.29.2020 09:30 Basis: Wet Weight  
 Seq Number: 3138435

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 20:39	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 20:39	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 20:39	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 20:39	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 20:39	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 20:39	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 20:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.29.2020 20:39	
4-Bromofluorobenzene	460-00-4	107	%	70-130	09.29.2020 20:39	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-58 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-042 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:30 Basis: Wet Weight  
 Seq Number: 3138445

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	09.29.2020 13:25	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138367

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.29.2020 05:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.29.2020 05:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.29.2020 05:09	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.29.2020 05:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	09.29.2020 05:09	
o-Terphenyl	84-15-1	83	%	70-130	09.29.2020 05:09	



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**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-58 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-042 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: AMF Date Prep: 09.29.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138443

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.29.2020 19:48	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.29.2020 19:48	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.29.2020 19:48	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.29.2020 19:48	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.29.2020 19:48	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.29.2020 19:48	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.29.2020 19:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	09.29.2020 19:48	
1,4-Difluorobenzene	540-36-3	98	%	70-130	09.29.2020 19:48	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-59 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-043 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:45 Basis: Wet Weight  
 Seq Number: 3138448

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.31	5.05	mg/kg	09.29.2020 14:20		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138367

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 05:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 05:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 05:31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 05:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	09.29.2020 05:31	
o-Terphenyl	84-15-1	86	%	70-130	09.29.2020 05:31	



# Certificate of Analytical Results 673711

**Tetra Tech- Midland, Midland, TX**  
 COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-59 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-043 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: AMF Date Prep: 09.29.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138443

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 20:09	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 20:09	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 20:09	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 20:09	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 20:09	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 20:09	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 20:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.29.2020 20:09	
4-Bromofluorobenzene	460-00-4	118	%	70-130	09.29.2020 20:09	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-60 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-044 Date Collected: 09.25.2020 00:00  
 Analytical Method: Chloride by EPA 300 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 09.29.2020 10:45 Basis: Wet Weight  
 Seq Number: 3138448

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	09.29.2020 14:37	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 09.28.2020 16:00 Basis: Wet Weight  
 Seq Number: 3138367

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.29.2020 05:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.29.2020 05:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.29.2020 05:53	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.29.2020 05:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	09.29.2020 05:53	
o-Terphenyl	84-15-1	85	%	70-130	09.29.2020 05:53	



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## Tetra Tech- Midland, Midland, TX

COG - Goldeneye 18 Federal Com #1H (10.15.19)

Sample Id: **SW-60 (4')** Matrix: Soil Date Received: 09.28.2020 13:06  
 Lab Sample Id: 673711-044 Date Collected: 09.25.2020 00:00  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: AMF % Moisture:  
 Analyst: AMF Date Prep: 09.29.2020 13:30 Basis: Wet Weight  
 Seq Number: 3138443

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.29.2020 20:30	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.29.2020 20:30	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.29.2020 20:30	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.29.2020 20:30	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.29.2020 20:30	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.29.2020 20:30	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.29.2020 20:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	09.29.2020 20:30	
1,4-Difluorobenzene	540-36-3	94	%	70-130	09.29.2020 20:30	





**Tetra Tech- Midland**

COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138336  
 MB Sample Id: 7712247-1-BLK

Matrix: Solid  
 LCS Sample Id: 7712247-1-BKS

Prep Method: E300P  
 Date Prep: 09.28.2020  
 LCSD Sample Id: 7712247-1-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	269	108	269	108	90-110	0	20	mg/kg	09.28.2020 16:58	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138339  
 MB Sample Id: 7712249-1-BLK

Matrix: Solid  
 LCS Sample Id: 7712249-1-BKS

Prep Method: E300P  
 Date Prep: 09.28.2020  
 LCSD Sample Id: 7712249-1-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	269	108	268	107	90-110	0	20	mg/kg	09.28.2020 20:01	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138445  
 MB Sample Id: 7712291-1-BLK

Matrix: Solid  
 LCS Sample Id: 7712291-1-BKS

Prep Method: E300P  
 Date Prep: 09.29.2020  
 LCSD Sample Id: 7712291-1-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	256	102	256	102	90-110	0	20	mg/kg	09.29.2020 10:40	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138448  
 MB Sample Id: 7712292-1-BLK

Matrix: Solid  
 LCS Sample Id: 7712292-1-BKS

Prep Method: E300P  
 Date Prep: 09.29.2020  
 LCSD Sample Id: 7712292-1-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	09.29.2020 14:09	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138336  
 Parent Sample Id: 673712-001

Matrix: Soil  
 MS Sample Id: 673712-001 S

Prep Method: E300P  
 Date Prep: 09.28.2020  
 MSD Sample Id: 673712-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	57.5	248	337	113	326	108	90-110	3	20	mg/kg	09.28.2020 17:15	X

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138336  
 Parent Sample Id: 673712-005

Matrix: Soil  
 MS Sample Id: 673712-005 S

Prep Method: E300P  
 Date Prep: 09.28.2020  
 MSD Sample Id: 673712-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	62.5	250	336	109	328	106	90-110	2	20	mg/kg	09.28.2020 18:32	

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

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

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

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



**Tetra Tech- Midland**

COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138339  
Parent Sample Id: 673711-006

Matrix: Soil  
MS Sample Id: 673711-006 S

Prep Method: E300P  
Date Prep: 09.28.2020  
MSD Sample Id: 673711-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	22.5	250	294	109	287	106	90-110	2	20	mg/kg	09.28.2020 20:18	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138339  
Parent Sample Id: 673711-016

Matrix: Soil  
MS Sample Id: 673711-016 S

Prep Method: E300P  
Date Prep: 09.28.2020  
MSD Sample Id: 673711-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	21.3	250	282	104	279	103	90-110	1	20	mg/kg	09.28.2020 21:36	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138445  
Parent Sample Id: 673711-026

Matrix: Soil  
MS Sample Id: 673711-026 S

Prep Method: E300P  
Date Prep: 09.29.2020  
MSD Sample Id: 673711-026 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	662	252	886	89	883	88	90-110	0	20	mg/kg	09.29.2020 10:59	X

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138445  
Parent Sample Id: 673711-036

Matrix: Soil  
MS Sample Id: 673711-036 S

Prep Method: E300P  
Date Prep: 09.29.2020  
MSD Sample Id: 673711-036 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.98	249	276	111	275	110	90-110	0	20	mg/kg	09.29.2020 12:28	X

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138448  
Parent Sample Id: 673651-025

Matrix: Soil  
MS Sample Id: 673651-025 S

Prep Method: E300P  
Date Prep: 09.29.2020  
MSD Sample Id: 673651-025 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	31.6	253	292	103	289	102	90-110	1	20	mg/kg	09.29.2020 15:45	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3138448  
Parent Sample Id: 673711-043

Matrix: Soil  
MS Sample Id: 673711-043 S

Prep Method: E300P  
Date Prep: 09.29.2020  
MSD Sample Id: 673711-043 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.31	253	262	101	257	99	90-110	2	20	mg/kg	09.29.2020 14:26	

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

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

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

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



**Tetra Tech- Midland**

COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3138362

MB Sample Id: 7712241-1-BLK

Matrix: Solid

LCS Sample Id: 7712241-1-BKS

Prep Method: SW8015P

Date Prep: 09.28.2020

LCSD Sample Id: 7712241-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	945	95	830	83	70-130	13	20	mg/kg	09.28.2020 12:06	
Diesel Range Organics (DRO)	<50.0	1000	1000	100	894	89	70-130	11	20	mg/kg	09.28.2020 12:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	85		87		79		70-130	%	09.28.2020 12:06
o-Terphenyl	88		82		76		70-130	%	09.28.2020 12:06

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3138363

MB Sample Id: 7712243-1-BLK

Matrix: Solid

LCS Sample Id: 7712243-1-BKS

Prep Method: SW8015P

Date Prep: 09.28.2020

LCSD Sample Id: 7712243-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	999	100	988	99	70-130	1	20	mg/kg	09.28.2020 23:23	
Diesel Range Organics (DRO)	<50.0	1000	1100	110	1110	111	70-130	1	20	mg/kg	09.28.2020 23:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		97		94		70-130	%	09.28.2020 23:23
o-Terphenyl	118		107		102		70-130	%	09.28.2020 23:23

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3138367

MB Sample Id: 7712244-1-BLK

Matrix: Solid

LCS Sample Id: 7712244-1-BKS

Prep Method: SW8015P

Date Prep: 09.28.2020

LCSD Sample Id: 7712244-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1020	102	1050	105	70-130	3	20	mg/kg	09.28.2020 23:02	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	995	100	70-130	2	20	mg/kg	09.28.2020 23:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		97		96		70-130	%	09.28.2020 23:02
o-Terphenyl	86		88		89		70-130	%	09.28.2020 23:02

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3138362

MB Sample Id: 7712241-1-BLK

Matrix: Solid

Prep Method: SW8015P

Date Prep: 09.28.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.28.2020 11:43	

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

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

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

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



# QC Summary 673711

## Tetra Tech- Midland

COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method:** TPH by SW8015 Mod  
Seq Number: 3138363

Prep Method: SW8015P  
Date Prep: 09.28.2020

Matrix: Solid  
MB Sample Id: 7712243-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.28.2020 23:02	

**Analytical Method:** TPH by SW8015 Mod  
Seq Number: 3138367

Prep Method: SW8015P  
Date Prep: 09.28.2020

Matrix: Solid  
MB Sample Id: 7712244-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.29.2020 00:07	

**Analytical Method:** TPH by SW8015 Mod  
Seq Number: 3138362

Prep Method: SW8015P  
Date Prep: 09.28.2020

Parent Sample Id: 673711-001 MS Sample Id: 673711-001 S MSD Sample Id: 673711-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	826	83	843	85	70-130	2	20	mg/kg	09.28.2020 14:21	
Diesel Range Organics (DRO)	<49.9	997	808	81	885	89	70-130	9	20	mg/kg	09.28.2020 14:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	80		82		70-130	%	09.28.2020 14:21
o-Terphenyl	80		86		70-130	%	09.28.2020 14:21

**Analytical Method:** TPH by SW8015 Mod  
Seq Number: 3138363

Prep Method: SW8015P  
Date Prep: 09.28.2020

Parent Sample Id: 673711-021 MS Sample Id: 673711-021 S MSD Sample Id: 673711-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	965	97	938	94	70-130	3	20	mg/kg	09.29.2020 00:28	
Diesel Range Organics (DRO)	<49.9	998	1060	106	1050	105	70-130	1	20	mg/kg	09.29.2020 00:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		90		70-130	%	09.29.2020 00:28
o-Terphenyl	97		95		70-130	%	09.29.2020 00:28

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

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

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

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



**Tetra Tech- Midland**

COG - Goldeneye 18 Federal Com #1H (10.15.19)

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3138367  
Parent Sample Id: 673712-001

Matrix: Soil  
MS Sample Id: 673712-001 S

Prep Method: SW8015P  
Date Prep: 09.28.2020  
MSD Sample Id: 673712-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	988	99	1020	102	70-130	3	20	mg/kg	09.29.2020 00:49	
Diesel Range Organics (DRO)	<49.9	998	969	97	978	98	70-130	1	20	mg/kg	09.29.2020 00:49	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		92		70-130	%	09.29.2020 00:49
o-Terphenyl	71		80		70-130	%	09.29.2020 00:49

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

Seq Number: 3138317  
MB Sample Id: 7712245-1-BLK

Matrix: Solid  
LCS Sample Id: 7712245-1-BKS

Prep Method: SW5035A  
Date Prep: 09.28.2020  
LCSD Sample Id: 7712245-1-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	0.117	117	0.112	112	70-130	4	35	mg/kg	09.28.2020 15:52	
Toluene	<0.00200	0.100	0.112	112	0.105	105	70-130	6	35	mg/kg	09.28.2020 15:52	
Ethylbenzene	<0.00200	0.100	0.107	107	0.102	102	70-130	5	35	mg/kg	09.28.2020 15:52	
m,p-Xylenes	<0.00400	0.200	0.230	115	0.218	109	70-130	5	35	mg/kg	09.28.2020 15:52	
o-Xylene	<0.00200	0.100	0.110	110	0.104	104	70-130	6	35	mg/kg	09.28.2020 15:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	84		104		99		70-130	%	09.28.2020 15:52
4-Bromofluorobenzene	97		106		103		70-130	%	09.28.2020 15:52

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

Seq Number: 3138432  
MB Sample Id: 7712250-1-BLK

Matrix: Solid  
LCS Sample Id: 7712250-1-BKS

Prep Method: SW5035A  
Date Prep: 09.28.2020  
LCSD Sample Id: 7712250-1-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	0.0998	0.108	108	0.110	110	70-130	2	35	mg/kg	09.29.2020 03:33	
Toluene	<0.00200	0.0998	0.101	101	0.104	104	70-130	3	35	mg/kg	09.29.2020 03:33	
Ethylbenzene	<0.00200	0.0998	0.0963	96	0.0981	98	70-130	2	35	mg/kg	09.29.2020 03:33	
m,p-Xylenes	<0.00399	0.200	0.204	102	0.208	104	70-130	2	35	mg/kg	09.29.2020 03:33	
o-Xylene	<0.00200	0.0998	0.100	100	0.101	101	70-130	1	35	mg/kg	09.29.2020 03:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	82		107		103		70-130	%	09.29.2020 03:33
4-Bromofluorobenzene	104		104		109		70-130	%	09.29.2020 03:33

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

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

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

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



**Tetra Tech- Midland**

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

Seq Number: 3138435

MB Sample Id: 7712324-1-BLK

Matrix: Solid

LCS Sample Id: 7712324-1-BKS

Prep Method: SW5035A

Date Prep: 09.29.2020

LCSD Sample Id: 7712324-1-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	0.0998	0.107	107	0.116	116	70-130	8	35	mg/kg	09.29.2020 10:34	
Toluene	<0.00200	0.0998	0.0997	100	0.121	121	70-130	19	35	mg/kg	09.29.2020 10:34	
Ethylbenzene	<0.00200	0.0998	0.106	106	0.114	114	70-130	7	35	mg/kg	09.29.2020 10:34	
m,p-Xylenes	<0.00399	0.200	0.217	109	0.234	117	70-130	8	35	mg/kg	09.29.2020 10:34	
o-Xylene	<0.00200	0.0998	0.105	105	0.114	114	70-130	8	35	mg/kg	09.29.2020 10:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		97		101		70-130	%	09.29.2020 10:34
4-Bromofluorobenzene	101		97		101		70-130	%	09.29.2020 10:34

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

Seq Number: 3138443

MB Sample Id: 7712338-1-BLK

Matrix: Solid

LCS Sample Id: 7712338-1-BKS

Prep Method: SW5035A

Date Prep: 09.29.2020

LCSD Sample Id: 7712338-1-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	0.121	121	0.120	120	70-130	1	35	mg/kg	09.29.2020 16:54	
Toluene	<0.00200	0.100	0.114	114	0.113	113	70-130	1	35	mg/kg	09.29.2020 16:54	
Ethylbenzene	<0.00200	0.100	0.109	109	0.109	109	70-130	0	35	mg/kg	09.29.2020 16:54	
m,p-Xylenes	<0.00400	0.200	0.234	117	0.233	117	70-130	0	35	mg/kg	09.29.2020 16:54	
o-Xylene	<0.00200	0.100	0.112	112	0.113	113	70-130	1	35	mg/kg	09.29.2020 16:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	79		105		101		70-130	%	09.29.2020 16:54
4-Bromofluorobenzene	114		121		122		70-130	%	09.29.2020 16:54

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

Seq Number: 3138317

Parent Sample Id: 673712-003

Matrix: Soil

MS Sample Id: 673712-003 S

Prep Method: SW5035A

Date Prep: 09.28.2020

MSD Sample Id: 673712-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.104	104	70-130	3	35	mg/kg	09.28.2020 16:34	
Toluene	<0.00200	0.100	0.102	102	0.0981	98	70-130	4	35	mg/kg	09.28.2020 16:34	
Ethylbenzene	<0.00200	0.100	0.0971	97	0.0933	93	70-130	4	35	mg/kg	09.28.2020 16:34	
m,p-Xylenes	<0.00400	0.200	0.206	103	0.197	99	70-130	4	35	mg/kg	09.28.2020 16:34	
o-Xylene	<0.00200	0.100	0.0996	100	0.0974	97	70-130	2	35	mg/kg	09.28.2020 16:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		102		70-130	%	09.28.2020 16:34
4-Bromofluorobenzene	106		112		70-130	%	09.28.2020 16:34

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

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

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

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



**Tetra Tech- Midland**

COG - Goldeneye 18 Federal Com #1H (10.15.19)

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

Seq Number: 3138432

Parent Sample Id: 673711-014

Matrix: Soil

MS Sample Id: 673711-014 S

Prep Method: SW5035A

Date Prep: 09.28.2020

MSD Sample Id: 673711-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0953	95	0.101	101	70-130	6	35	mg/kg	09.29.2020 04:15	
Toluene	<0.00200	0.0998	0.0853	85	0.0898	90	70-130	5	35	mg/kg	09.29.2020 04:15	
Ethylbenzene	<0.00200	0.0998	0.0827	83	0.0867	87	70-130	5	35	mg/kg	09.29.2020 04:15	
m,p-Xylenes	<0.00399	0.200	0.170	85	0.180	90	70-130	6	35	mg/kg	09.29.2020 04:15	
o-Xylene	<0.00200	0.0998	0.0857	86	0.0907	91	70-130	6	35	mg/kg	09.29.2020 04:15	

**Surrogate**

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		109		70-130	%	09.29.2020 04:15
4-Bromofluorobenzene	107		107		70-130	%	09.29.2020 04:15

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

Seq Number: 3138435

Parent Sample Id: 673711-034

Matrix: Soil

MS Sample Id: 673711-034 S

Prep Method: SW5035A

Date Prep: 09.29.2020

MSD Sample Id: 673711-034 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0944	95	0.104	104	70-130	10	35	mg/kg	09.29.2020 11:15	
Toluene	<0.00199	0.0996	0.102	102	0.0991	99	70-130	3	35	mg/kg	09.29.2020 11:15	
Ethylbenzene	<0.00199	0.0996	0.0970	97	0.102	102	70-130	5	35	mg/kg	09.29.2020 11:15	
m,p-Xylenes	<0.00398	0.199	0.201	101	0.208	104	70-130	3	35	mg/kg	09.29.2020 11:15	
o-Xylene	<0.00199	0.0996	0.0980	98	0.102	102	70-130	4	35	mg/kg	09.29.2020 11:15	

**Surrogate**

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		98		70-130	%	09.29.2020 11:15
4-Bromofluorobenzene	105		101		70-130	%	09.29.2020 11:15

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

Seq Number: 3138443

Parent Sample Id: 673765-001

Matrix: Soil

MS Sample Id: 673765-001 S

Prep Method: SW5035A

Date Prep: 09.29.2020

MSD Sample Id: 673765-001 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	0.115	116	0.114	114	70-130	1	35	mg/kg	09.29.2020 17:36	
Toluene	<0.00199	0.0994	0.104	105	0.102	102	70-130	2	35	mg/kg	09.29.2020 17:36	
Ethylbenzene	<0.00199	0.0994	0.0956	96	0.0925	93	70-130	3	35	mg/kg	09.29.2020 17:36	
m,p-Xylenes	<0.00398	0.199	0.202	102	0.196	98	70-130	3	35	mg/kg	09.29.2020 17:36	
o-Xylene	<0.00199	0.0994	0.0979	98	0.0965	97	70-130	1	35	mg/kg	09.29.2020 17:36	

**Surrogate**

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		110		70-130	%	09.29.2020 17:36
4-Bromofluorobenzene	119		137	**	70-130	%	09.29.2020 17:36

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

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

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

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

Analysis Request of Chain of Custody Record



# Tetra Tech, Inc.

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

673711

Client Name: COG Site Manager: Mike Carmona

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

Project Location: (county, state) Eddy County, New Mexico Project #: 212C-MD-02306

Invoice to: Ike Tavarez Receiving Laboratory: Xenco Labs Sampler Signature: Devin D

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		DATE	TIME	MATRIX	PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	
		YEAR: 2020					WATER	SOIL	HCL	HNO <sub>3</sub>			ICE
	Bottom Hole-20 (2)			9/25/2020		X				X		1	N
	Bottom Hole-21 (2)			9/25/2020		X				X		1	N
	Bottom Hole-22 (2)			9/25/2020		X				X		1	N
	Bottom Hole-23 (2)			9/25/2020		X				X		1	N
	Bottom Hole-24 (2)			9/25/2020		X				X		1	N
	Bottom Hole-25 (2)			9/25/2020		X				X		1	N
	Bottom Hole-26 (2)			9/25/2020		X				X		1	N
	Bottom Hole-27 (2)			9/25/2020		X				X		1	N
	Bottom Hole-28 (2)			9/25/2020		X				X		1	N
	Bottom Hole-29 (2)			9/25/2020		X				X		1	N

Relinquished by: *[Signature]* Date: 9/28/20 Time: 1306  
 Relinquished by: *[Signature]* Date: 9/28/20 Time: 1306  
 Relinquished by: *[Signature]* Date: 9/28/20 Time: 1306

**ANALYSIS REQUEST**  
(Circle or Specify Method No.)

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

LAB USE ONLY  
 Sample Temperature: -2.1

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record



# Tetra Tech, Inc.

900 West Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4539  
Fax (432) 682-3946

073711

Page

2 of

5

Client Name: COG Site Manager: Mike Carmona

Project Name: Goldeneye 18 Federal Com #1H (10.15.19)

Project Location: Eddy County, New Mexico Project #: 212C-MD-02306

Invoice to: Ike Tavares

Receiving Laboratory: Xenco Labs Sampler Signature: Devin D

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		DATE	TIME	MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		YEAR: 2020				WATER	SOIL	HCL	HNO <sub>3</sub>		
	Bottomhole-30 (2)	9/25/2020				X		X		1	N
	Bottomhole-31 (2)	9/25/2020				X		X		1	N
	Bottomhole-32 (2)	9/25/2020				X		X		1	N
	Bottomhole-33 (2.5)	9/25/2020				X		X		1	N
	Bottomhole-34 (2.5)	9/25/2020				X		X		1	N
	Bottomhole-35 (2.5)	9/25/2020				X		X		1	N
	Bottomhole-36 (2.5)	9/25/2020				X		X		1	N
	Bottomhole-37 (4)	9/25/2020				X		X		1	N
	Bottomhole-38 (4)	9/25/2020				X		X		1	N
	Bottomhole-39 (4)	9/25/2020				X		X		1	N

Relinquished by: *Kevin Young* 9/25/20 1306  
 Received by: *Mike Carmona* 9/25/20 1306

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

ANALYSIS REQUEST  
(Circle or Specify Method No.)

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

LAB USE ONLY

Sample Temperature: -2.1

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72hr

Rush Charges Authorized

Special Report Limits or TRRP Report

ORIGINAL COPY

Analysis Request of Custody Record



# Tetra Tech, Inc.

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

678711

Client Name: COG Site Manager: Mike Carmona  
 Project Name: Goldeneye 18 Federal Com #1H (10.15.19)  
 Project Location: (county, state) Eddy County, New Mexico Project #: 212C-MD-02306  
 Invoice to: Ike Tavares  
 Receiving Laboratory: Xenco Labs Sampler Signature: Devin D  
 Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)	REMARKS:
	YEAR: 2020	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE				
	Bottomhole-40 (4)	9/25/2020		X				X	1	N	BTEX 8021B BTEX 8260B	
	Bottomhole-41 (4)	9/25/2020		X				X	1	N	TPH TX1005 (Ext to C35)	
	Bottomhole-42 (4)	9/25/2020		X				X	1	N	TPH 8015M ( GRO - DRO - ORO - MRO)	
	Bottomhole-43 (4)	9/25/2020		X				X	1	N	PAH 8270C	
	Bottomhole-44 (4)	9/25/2020		X				X	1	N	Total Metals Ag As Ba Cd Cr Pb Se Hg	
	Bottomhole-45 (4)	9/25/2020		X				X	1	N	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
	Bottomhole-46 (4)	9/25/2020		X				X	1	N	TCLP Volatiles	
	Bottomhole-47 (4)	9/25/2020		X				X	1	N	TCLP Semi Volatiles	
	Bottomhole-48 (4)	9/25/2020		X				X	1	N	RCI	
	Bottomhole-49 (4)	9/25/2020		X				X	1	N	GC/MS Vol. 8260B / 624	
											GC/MS Semi. Vol. 8270C/625	
											PCB's 8082 / 608	
											NORM	
											PLM (Asbestos)	
											Chloride	
											Chloride Sulfate TDS	
											General Water Chemistry (see attached list)	
											Anion/Cation Balance	
											TPH 8015R	
											Hold	

Relinquished by: *Beam Myranda* Date: 9/28/20 Time: 1306  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: *W. CARMONA* Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

LAB USE ONLY  
 Sample Temperature: *-2.1*  
 REMARKS:  
 STANDARD  
 RUSH: Same Day 24 hr 48 hr 72 hr  
 Rush Charges Authorized  
 Special Report Limits or TRRP Report

ORIGINAL COPY



Analysis Request of Custody Record



# Tetra Tech, Inc.

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

073711

Client Name: COG Site Manager: Mike Carrmona  
 Project Name: Goldeneye 18 Federal Com #1H (10.15.19)  
 Project Location: Eddy County, New Mexico Project #: 212C-MD-02306  
 Invoice to: Ike Tavaraz  
 Receiving Laboratory: Xenco Labs Sampler Signature: Devin D  
 Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION		SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	YEAR: 2020	DATE	TIME	WATER	SOIL	HCL	HNO <sub>3</sub>	ICE		
	SW-57 (4')	9/25/2020		X				X	1	N
	SW-58 (4')	9/25/2020		X				X	1	N
	SW-59 (4')	9/25/2020		X				X	1	N
	SW-60 (4')	9/25/2020		X				X	1	N

Relinquished by: *Carrmona* Date: 9/28/20 Time: 1506  
 Received by: *Devin D* Date: 9/28/20 Time: 1306

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: -2.1

(Circle) HAND DELIVERED FEDEX UPS Tracking #: \_\_\_\_\_

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

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

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

Hold

ORIGINAL COPY

# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 09.28.2020 01.06.00 PM

Work Order #: 673711

Acceptable Temperature Range: 0 - 6 degC  
Air and Metal samples Acceptable Range: Ambient  
Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-2.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6*Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 09.28.2020  
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 09.29.2020  
Jessica Kramer

### SCARBOROUGH DRILLING, INC.

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

#### WELL LOG

From	To	FORMATION
0	4	Brown Top Soil
4	5	Caliche
5	12	Red Sand
12	20	Red Sand w/ Caliche layers
20	30	Caliche w Red Sand
30	55	Red Shale w/ Caliche
		BH1
		LOG - Seabiscuit
		Federal Com 2H+4H
		Plugged w/ Hole Plug
		32.233386 -103.719410

Date 8-5-20 Driller Luc Seal  
GIBBS PRINTING CO. LAMESA, TX

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

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

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

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

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

CONDITIONS

Action 11351

**CONDITIONS OF APPROVAL**

Operator:	COG OPERATING LLC	600 W Illinois Ave	Midland, TX79701	OGRID:	229137	Action Number:	11351	Action Type:	C-141
OCD Reviewer				Condition					
ceads				None					