

SITE INFORMATION

Report Type: Deferment Closure Report

General Site Information:

Site:	King Tut Federal #1H				
Company:	COG Operating LLC				
Section, Township and Range	Unit D	Sec. 30	T 24S	R 32E	
County:	Lea County				
GPS:	32.194507			-103.71946	
Surface Owner:	Federal				
Directions:	From NM 128 & Buck Johnson Rd in Lea County, travel SOUTHWEST on Buck Johnson for 0.40 mi, turn SOUTH onto lease road for 2.5 mi, turn EAST onto lease road for 0.25 mi to location.				

Release Data:

Date Released:	11/26/2019
Type Release:	Produced Water
Source of Contamination:	Flowline
Fluid Released:	310 bbl water
Fluids Recovered:	40 bbls water

Official Communication:

Name:	Ike Tavaréz		Clair Gonzales
Company:	COG Operating, LLC		Tetra Tech
Address:	One Concho Center		901 West Wall Street
	600 W. Illinois Ave.		Suite 100
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 686-3023		(432) 687-8110
Fax:	(432) 684-7137		
Email:	itavarez@concho.com		Clair.Gonzales@tetrattech.com

Site Characterization

Depth to Groundwater:	290' below surface
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Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	20,000 mg/kg



May 26, 2020

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

Re: Deferment/Closure Report for the COG Operating LLC., King Tut Federal #1H, Unit D, Section 30, Township 24 South, Range 32 East, Lea County, New Mexico.

To whom it may concern:

COG Operating LLC. Contacted Tetra Tech, Inc. (Tetra Tech), to assess a release that occurred at King Tut Federal #1H, Unit D, Section 30, Township 24 South, Range 32 East, Lea County, New Mexico (Site). The spill site coordinates are 32.194507^o, -103.71946^o. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the release occurred on November 26, 2019, and released approximately three hundred and ten (310) barrels of produced water due to a pinhole in a line. Vacuum trucks were used to remove the freestanding fluids, recovering approximately forty (40) barrels of produced water. The release occurred on a pad and migrated onto the pasture impacting an areas measuring approximately 200' x 5' and 118' x 77'. The initial C-141 form is included in Appendix A.

Site Characterization

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 and the site is in a low karst potential area. The nearest well is listed on the USGS National Water Information System in Section 33, approximately 3.1 miles southeast of the site, and has a reported depth to groundwater of 290 feet below surface. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in the area is between 325 and 350 feet below surface. The groundwater data is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine

Tetra Tech

901 West Wall St, Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, the proposed RRAL for TPH is 2,500 mg/kg (GRO + DRO + MRO) and 1,000 mg/kg (GRO + DRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 20,000 mg/kg.

Soil Assessment and Analytical Results

On December 9, 2019, Tetra Tech personnel were on-site to evaluate and sample the release area, after verifying the locations of numerous buried lines. Ten (10) auger holes (AH-1, AH-2, AH-3, AH-4, AH-5, AH-6, AH-7, AH-8, AH-9, and AH-10) were installed in the release area to total depths ranging from 0-1' to 5.5' below surface. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Auger holes

Referring to Table 1, none of the samples analyzed showed benzene, total BTEX, or TPH concentrations above the laboratory reporting limits. The area of auger hole (AH-3) showed concentrations below the RRALs for benzene, total BTEX, TPH, and chloride. Additionally, the chloride concentrations detected in the areas of auger holes (AH-1, AH-2, AH-4, AH-5, AH-6, AH-7, AH-8, and AH-9) were above the RRAL with chloride highs of 3,640 mg/kg (0-1.0'), 2,130 mg/kg (0-1.0'), 9,080 mg/kg (2'-2.5'), 7,310 mg/kg (1.0'-1.5'), 2,200 mg/kg (0-1.0'), 10,700 mg/kg (0-1.0'), 14,900 mg/kg (1.0'-1.5'), 5,430 mg/kg (1.0'-1.5'), respectively. The area of auger hole (AH-10) showed a chloride concentration of 377 mg/kg at surface to 1.0' and 50.6 mg/kg at 1.0'-1.5' mg/kg, respectively.

Remediation Activities

Tetra Tech personnel were onsite from February 10, 2020, to supervise the reclamation activities, after verifying the locations of numerous buried lines. The release areas that were safely accessible were excavated to depths ranging from 1.0' to 4.0' below the surface. A total of twenty-seven (27) bottom holes (Bottom Hole-1 through Bottom Hole-27) and twenty-five (25) sidewall samples (NSW-1 through NSW-6, ESW-1 through ESW-6, WSW-1 through WSW-7, and SSW-1 through SSW-6) were collected every 200 square feet for documentation purposes. All the samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 1. The excavation depths and confirmation sample locations are shown on Figure 4.



Referring to Table 1, none of the samples collected showed benzene, total BTEX, or TPH concentrations above the laboratory reporting limits. Additionally, none of the samples showed chloride concentrations above the RRALs. However, high chloride concentrations were detected in Bottom Hole-9, Bottom Hole-10, Bottom Hole-11, Bottom Hole-13, and Bottom Hole-15 with concentrations of 3,760 mg/kg, 3,400 mg/kg, 1,600 mg/kg, 1,380, and 1,280 mg/kg. Those areas were excavated to at 4.0'-4.5' below the surface, and all confirmation samples showed concentrations below RRALs.

Once the reclamation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 560 cubic yards of material was hauled for proper disposal.

Deferment Areas

The areas of auger holes (AH-8 and AH-9) are within the tank battery. These are inaccessible with equipment due to confining space and constitute hazards of damaging lines and piping leading from the tanks. COG request that the areas of auger holes (AH-8 and AH-9) are deferred.

Conclusion

The release area on the pasture did not show any benzene, total BTEX, TPH or chloride concentrations above the RRALs. Due to numerous aboveground, buried lines, and electric lines in the area, the release areas on the pad is not accessible and cannot be safely reclaimed or excavated.

Respectfully submitted,
TETRA TECH

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

Mike Carmona,
Geologist



 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



STATE LOCATOR MAP

OVERVIEW MAP
 KING TUT FEDERAL 1H
 Property Located at 32.194507°,-103.719746°
 LEA COUNTY, NEW MEXICO

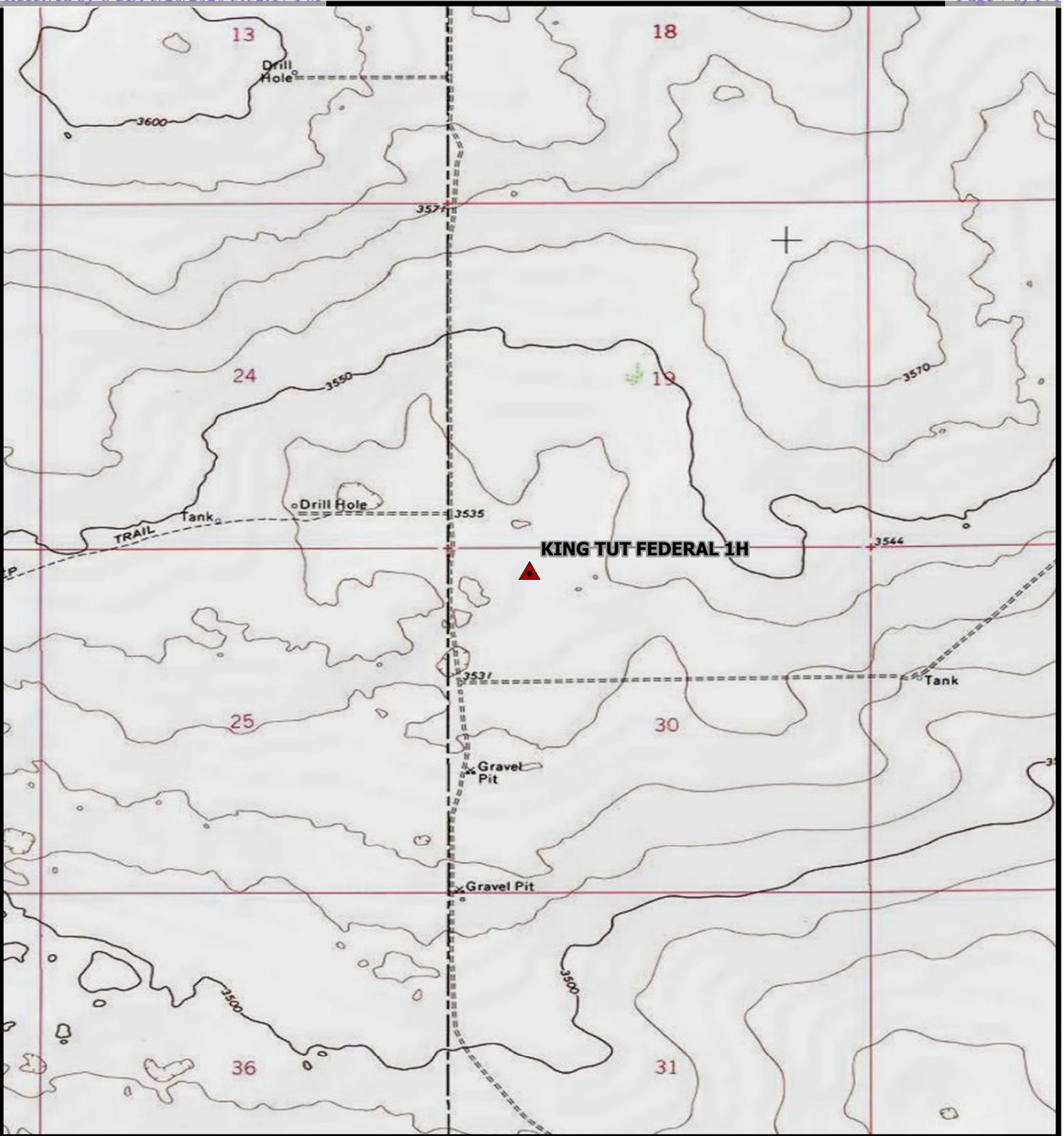


Project #:
 212C-MD-02024
 Date: 11-11-2019

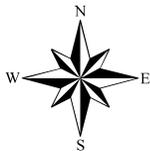
FIGURE
 1

Document Path: H:\GIS\CONCHO RESOURCES - COG\12c-MD-01615 (01920) KING TUT FEDERAL #1\11\MD\212C-MD-01920 KING TUT FED 1H FIG.1.mxd

Figures



▲ SITE LOCATION



0 1,000 2,000

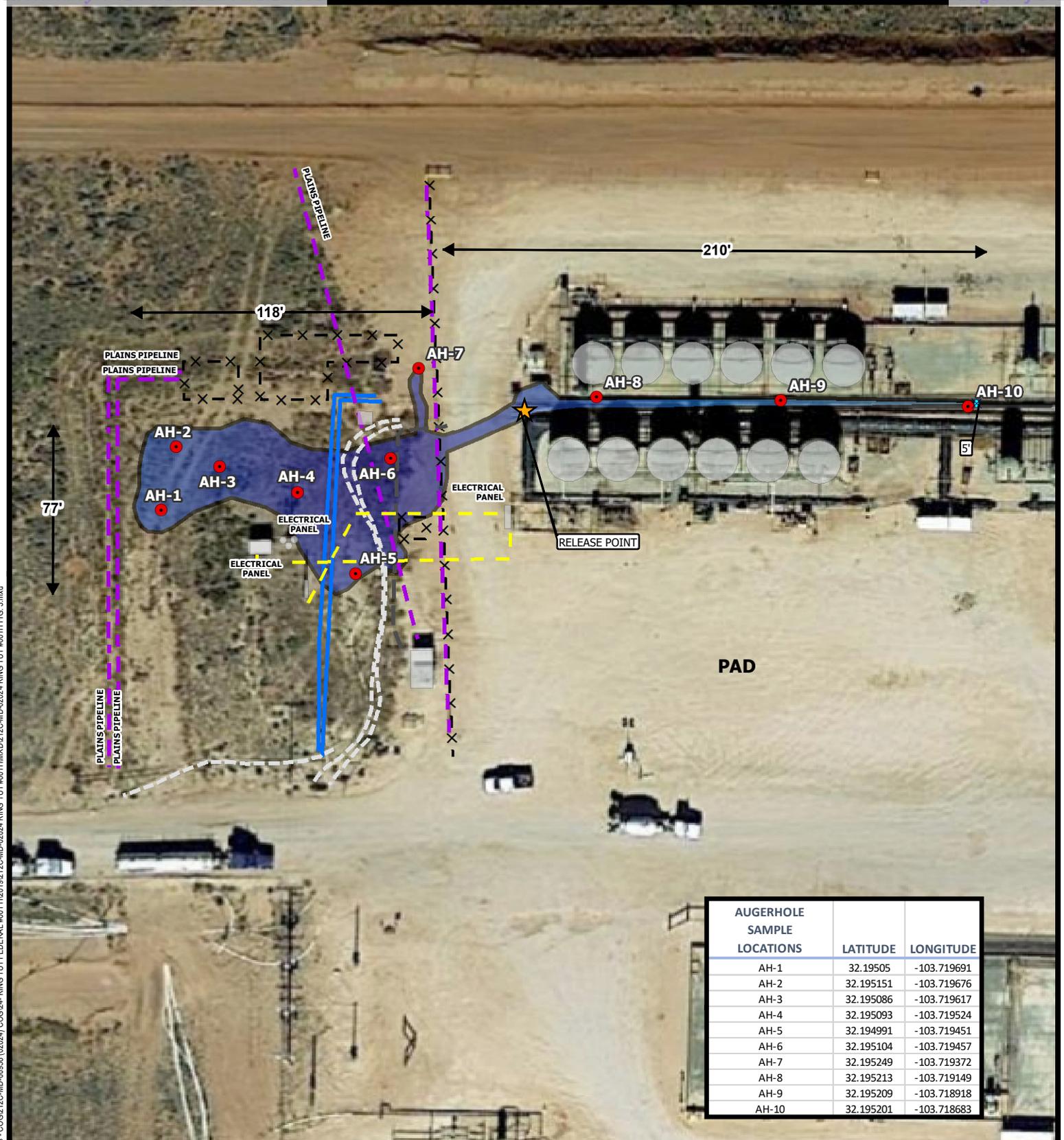
Approximate Scale in Feet

TOPOGRAPHIC MAP
 KING TUT FEDERAL 1H
 Property Located at 32.194507°,-103.719746°
 LEA COUNTY, NEW MEXICO



Project #:
 212C-MD-02024
 Date: 11-11-2019

FIGURE
 2



AUGERHOLE SAMPLE LOCATIONS	LATITUDE	LONGITUDE
AH-1	32.19505	-103.719691
AH-2	32.195151	-103.719676
AH-3	32.195086	-103.719617
AH-4	32.195093	-103.719524
AH-5	32.194991	-103.719451
AH-6	32.195104	-103.719457
AH-7	32.195249	-103.719372
AH-8	32.195213	-103.719149
AH-9	32.195209	-103.718918
AH-10	32.195201	-103.718683

- AUGERHOLE SAMPLE LOCATIONS
- ★ RELEASE POINT
- BURIED ELECTRICAL LINES
- X FENCELINE
- FIBERGLASS PIPELINE
- STEEL PIPE
- BURIED PIPELINE
- POLY LINE (DEAD LINE)
- X FENCE BOUNDARY- HEADER
- EQUIPMENT
- SPILL AREA

Approximate Scale in Feet

Date: 5/26/2020 Document Path: H:\GIS\CONCHO RESOURCES - COG\212C-MD-02024 KING TUT FEDERAL #001H FIG. 3.mxd
 Sources: "New Mexico", 32°11'40.237"N, 103°47'11.09"W, Google Earth, November 2017, December 6, 2019

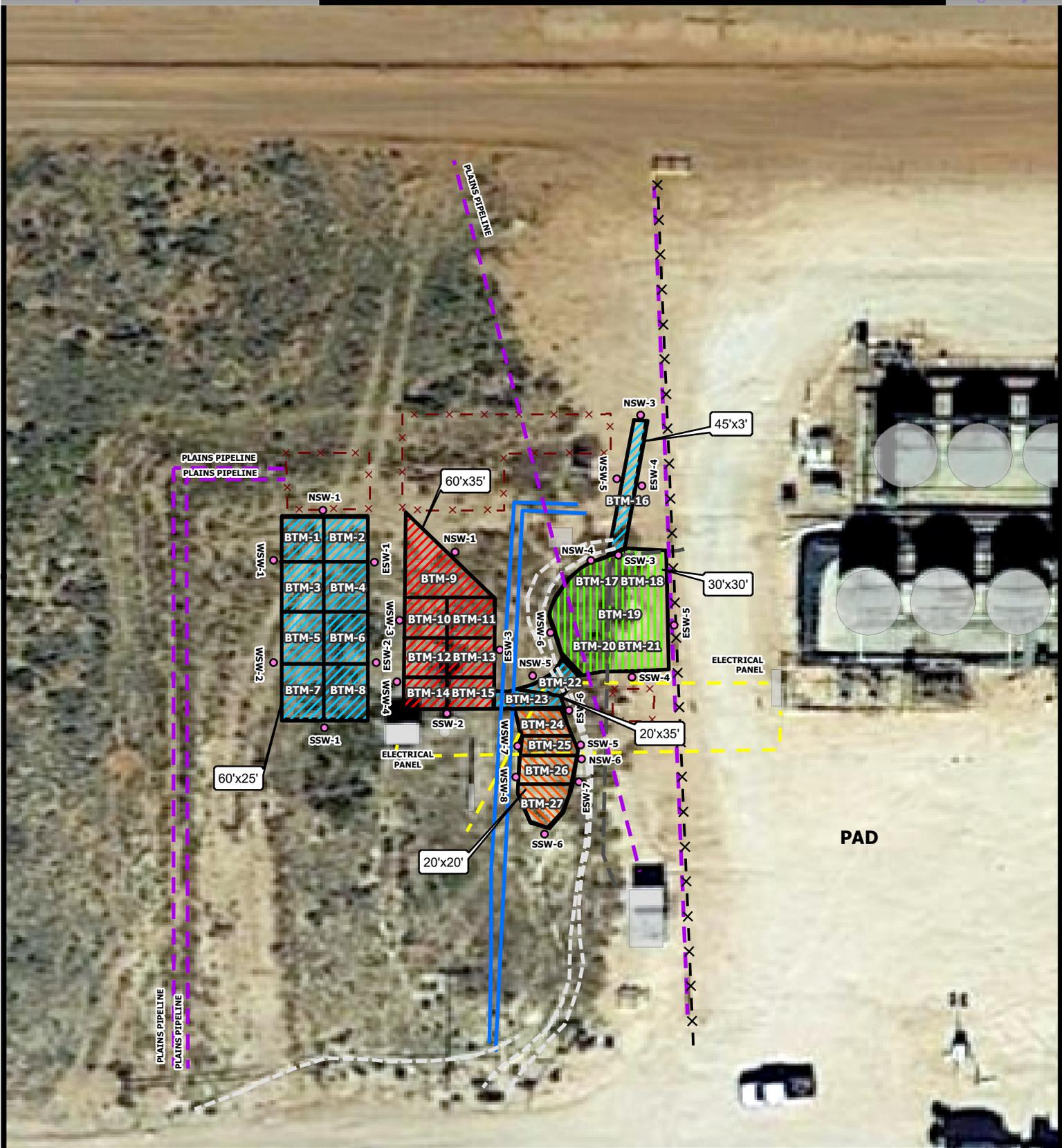
SPILL ASSESSMENT MAP
KING TUT FEDERAL #001H
 Property Located at coordinates 32.194507°,-103.719746°
 LEA COUNTY, NEW MEXICO

Project #:
212C-MD-02024
Date: 05-26-2020

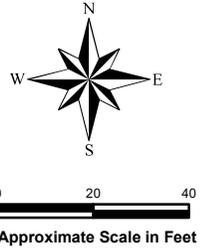
FIGURE
3

Date: 5/26/2020 Document Path: H:\GIS\CONCHO RESOURCES - COG\212C-MD-02024 KING TUT FEDERAL #001H FIG. 3.mxd

Date: 2/19/2020 Document Path: H:\GIS\CONCHO RESOURCES - COG\24- KING TUT FEDERAL- #001 H\2019\212C-MD-02024 KING TUT #001\HM\XD\212C-MD-02024 KING TUT #001\FIG_4a.mxd



- SIDEWALL SAMPLE LOCATIONS
- ✕ FENCELINE
- FIBERGLASS PIPELINE
- STEEL PIPE
- BURIED PIPELINE
- POLY LINE (DEAD LINE)
- BURIED ELECTRICAL LINES
- ✕✕ FENCE BOUNDARY- HEADER
- █ 4.0' EXCAVATED DEPTH
- █ 3.5' EXCAVATED DEPTH
- █ 3.0' EXCAVATED DEPTH
- █ 1.5' EXCAVATED DEPTH
- EQUIPMENT



EXCAVATED AREA & DEPTH MAP
 KING TUT FEDERAL #001H
 Property Located at coordinates 32.194507°,-103.719746°
 LEA COUNTY, NEW MEXICO



FIGURE
4

Tables

Table 1
COG
King Tut Federal #001H (11.26.19)
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)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	GRO+DRO	ORO	Total						
Bottomhole 1	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
Bottomhole 2	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
Bottomhole 3	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
Bottomhole 4	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
Bottomhole 5	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
Bottomhole 6	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
Bottomhole 7	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
Bottomhole 8	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
Bottomhole 9	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	3,760
Bottomhole 10	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	3,400
Bottomhole 11	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,600
Bottomhole 12	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
Bottomhole 13	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,380
Bottomhole 14	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
Bottomhole 15	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,280
Bottomhole 16	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
Bottomhole 17	2/10/2020	-	3.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
Bottomhole 18	2/10/2020	-	3.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
Bottomhole 19	2/10/2020	-	3.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
Bottomhole 20	2/10/2020	-	3.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
Bottomhole 21	2/10/2020	-	3.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
Bottomhole 22	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	240
Bottomhole 23	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
Bottomhole 24	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
Bottomhole 25	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
Bottomhole 26	2/10/2020	-	3.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
Bottomhole 27	2/10/2020	-	3.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0

Table 1
COG
King Tut Federal #001H (11.26.19)
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)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	GRO+DRO	ORO	Total						
NSW-1	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
NSW-2	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
NSW-3	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0
NSW-4	2/10/2020	-	3.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
NSW-5	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128
NSW-6	2/10/2020	-	3.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SSW-1	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
SSW-2	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
SSW-3	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	96.0
SSW-4	2/10/2020	-	3.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	128
SSW-5	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
SSW-6	2/10/2020	-	3.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
WSW-1	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
WSW-2	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
WSW-3	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
WSW-4	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
WSW-5	2/10/2020	-	3.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
WSW-6	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
WSW-7	2/10/2020	-	3.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
ESW-1	2/10/2020	-	2.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
ESW-2	2/10/2020	-	4.0-4.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
ESW-3	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
ESW-4	2/10/2020	-	3.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
ESW-5	2/10/2020	-	1.5	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
ESW-6	2/10/2020	-	3.0	X		<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	80.0

Photos

Concho King Tut #001H
Lea County, New Mexico



TETRA TECH



View North, area of Bottom holes 1-8



View North, area of Bottom holes 9-15

Concho King Tut #001H
Lea County, New Mexico



View North, area of Bottom hole 16



View Southeast, area of Bottom holes 17 through 21

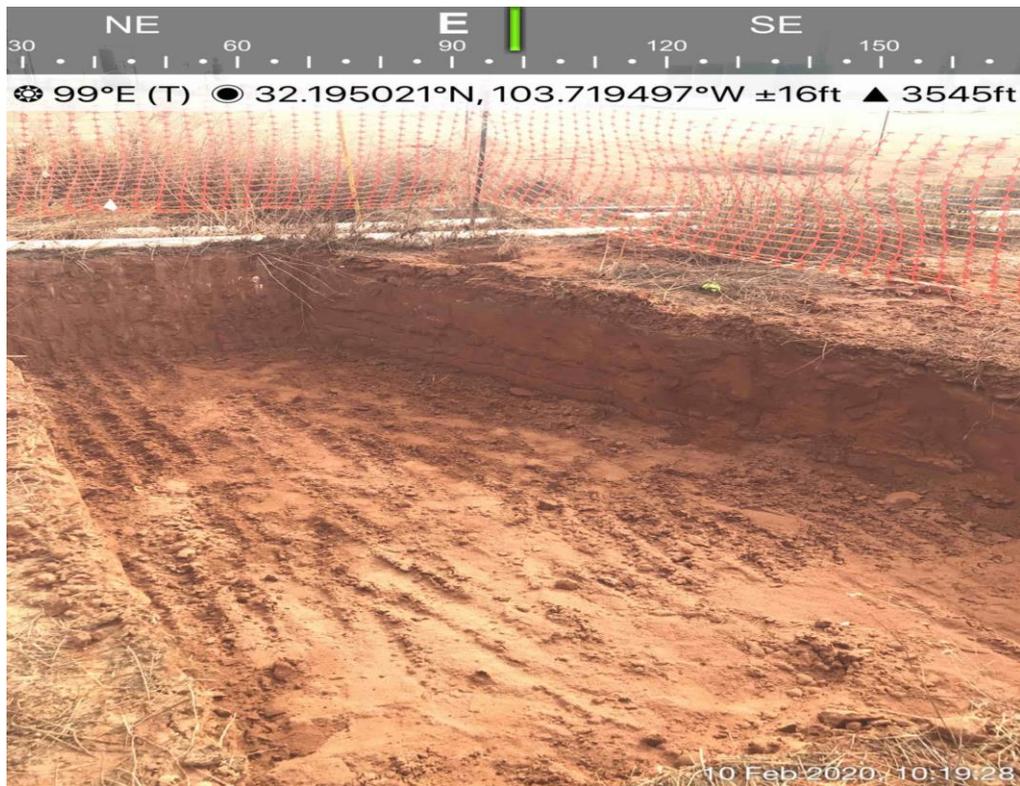
Concho King Tut #001H
Lea County, New Mexico



TETRA TECH



View Northwest, areas of Bottom holes 22-25



View East, areas of Bottom holes 26 and 27

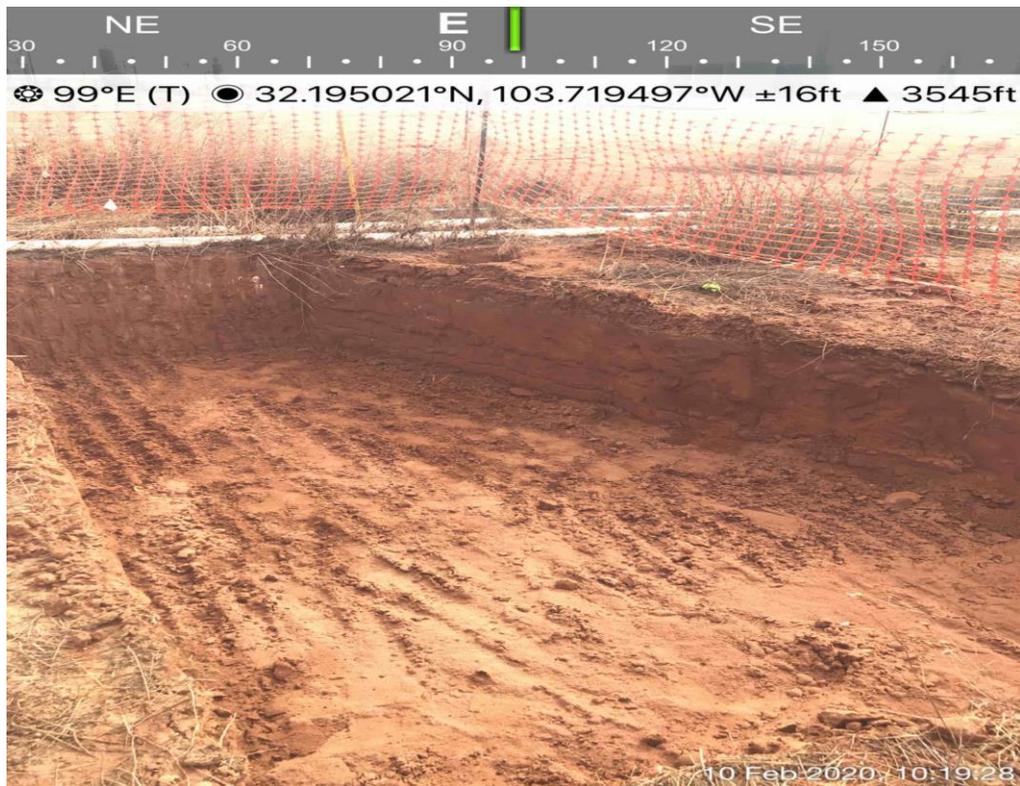
Concho King Tut #001H
Lea County, New Mexico



TETRA TECH



View Northwest, area of Bottom holes 22-25

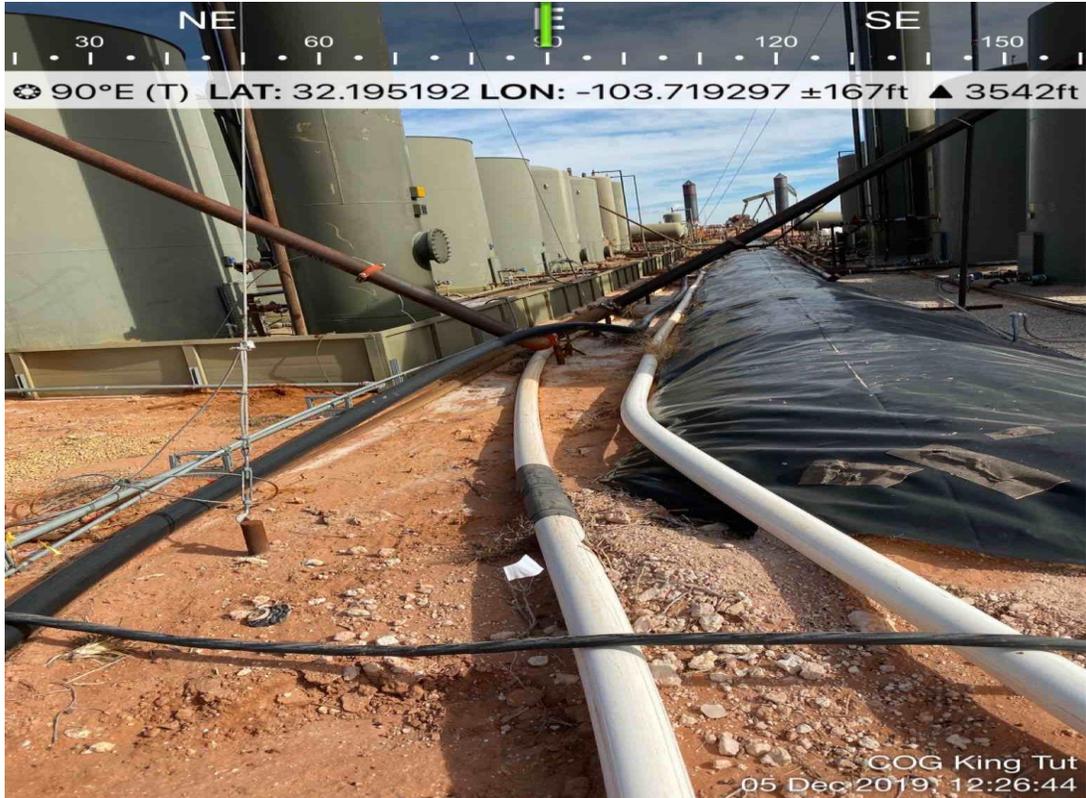


View East, area of Bottom holes 26 and 27

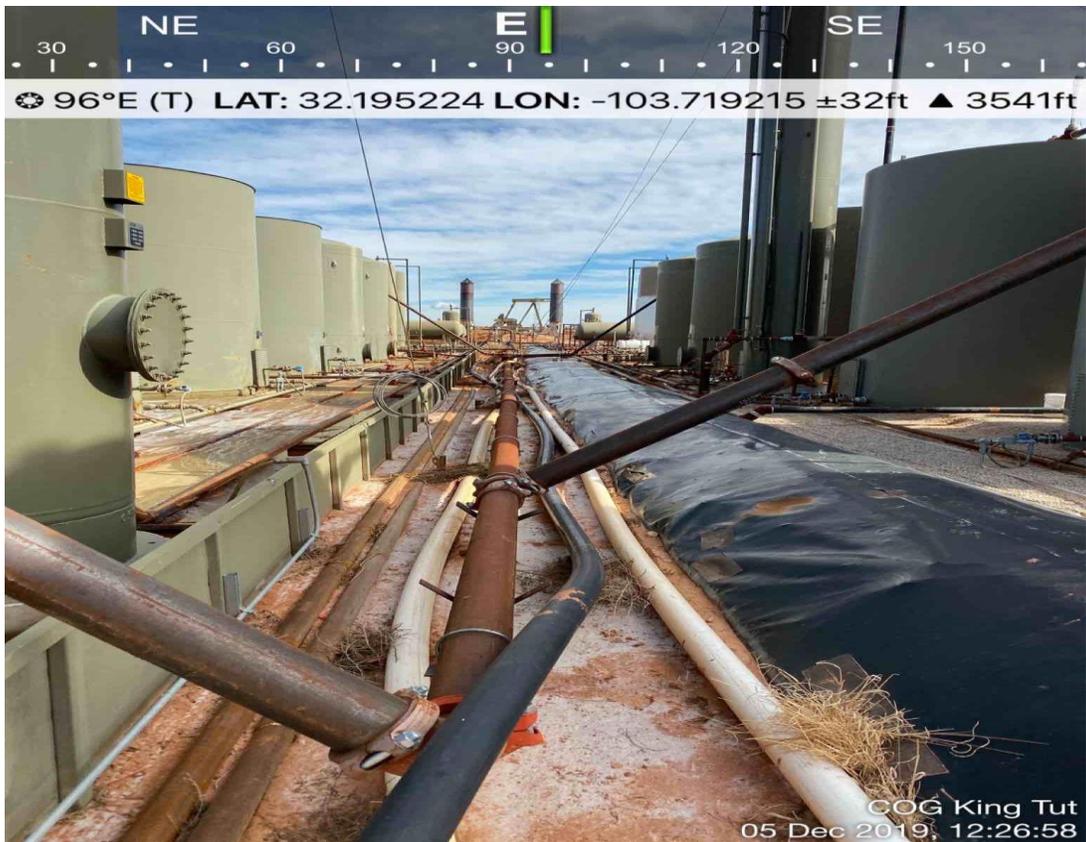
Concho King Tut #001H
Lea County, New Mexico



TETRA TECH



View East, area of AH-8, AH-9, and AH-10



View East, area of AH-8, AH-9, and AH-10

Appendix A

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	
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

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>Patricia Espinoza</u> _____ Date: _____ email: _____ Telephone: _____
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	NRM2002735293
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 not 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.

Incident ID	NRM2002735293
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: 05/26/2020

Incident ID	NRM2002735293
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: 05/26/2020

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: 09/01/2020
 Printed Name: Cristina Eads Title: Environmental Specialist

Appendix B

Water Well Data Average Depth to Groundwater (ft) COG - King Tut Federal #1H

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
31	32	33	34	35	36

23 South			32 East		
6	5	4	3	2	1
7	639				
18	17	16	15	14	13
19	20	21	22	23	24
	713	400			
30	29	28	27	26	25
31	32	33	34	35	36

23 South			33 East		
6	5	4	3	2	1
7	475				
18	17	16	15	14	13
19	20	21	22	23	24
400	400				
30	29	28	27	26	25
		400		225	225
31	32	33	34	35	36

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

24 South			32 East		
6	5	4	3	2	1
	380				
7	8	9	10	11	12
			20		
18	17	16	15	14	13
19	20	21	22	23	24
30					
31	32	33	34	35	36
			290		

24 South			33 East		
6	5	4	3	2	1
7	8	9	10	11	12
			24.6		
18	17	16	15	14	13
19	20	21	22	23	24
				208	16.9
30	29	28	27	26	25
31	32	33	34	35	36
			93.2		

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				

25 South			33 East		
6	5	4	3	2	1
			172		
7	8	9	10	11	12
				140	200
18	17	16	15	14	13
19	20	21	22	23	24
	200	120			
30	29	28	27	26	25
			125		
31	32	33	34	35	36
257					

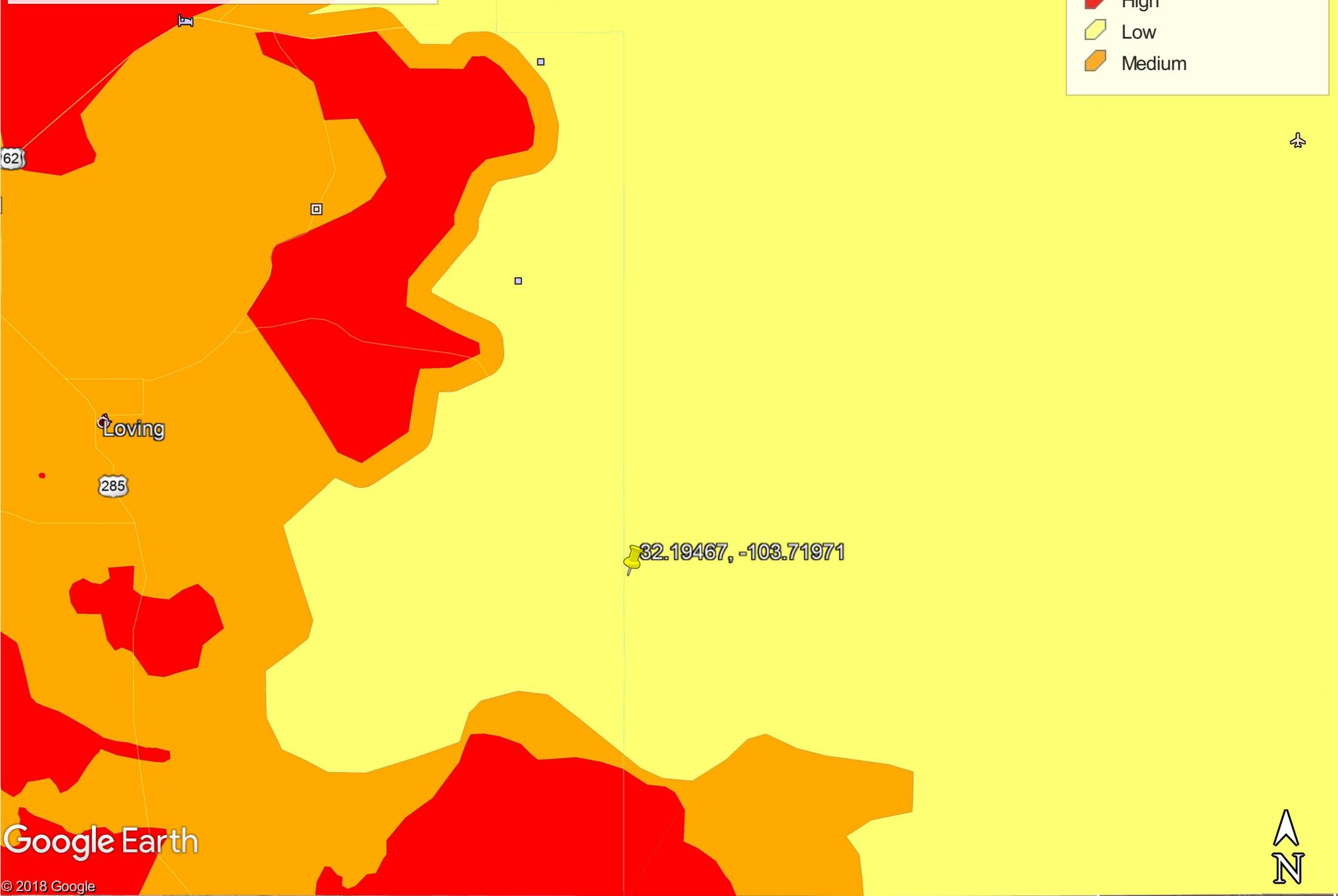
- 88** New Mexico State Engineers Well Reports
- 105** USGS Well Reports
- 90** Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34** NMOCD - Groundwater Data
- 121** Abandoned Waterwell (recently measured)

COG-King Tut Federal #1H

Karst Potential

Legend

-  32.19467, -103.71971
-  High
-  Low
-  Medium



Google Earth



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:	Geographic Area:	GO
Groundwater	New Mexico	

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

site_no list =

- 321005103402301

Minimum number of levels = 1

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

USGS 321005103402301 24S.32E.33.42241

Available data for this site

Lea County, New Mexico

Hydrologic Unit Code 13070001

Latitude 32°10'21.6", Longitude 103°40'18.9" NAD83

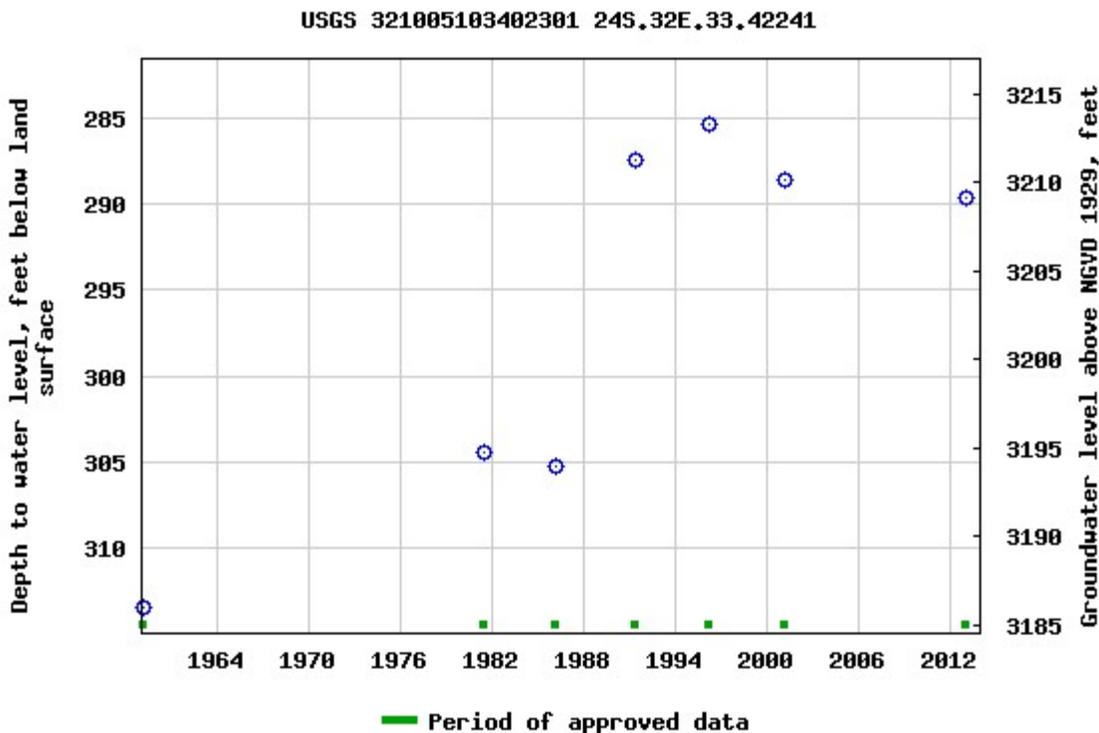
Land-surface elevation 3,499.00 feet above NGVD29

The depth of the well is 367 feet below land surface.

This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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



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

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[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for New Mexico: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>

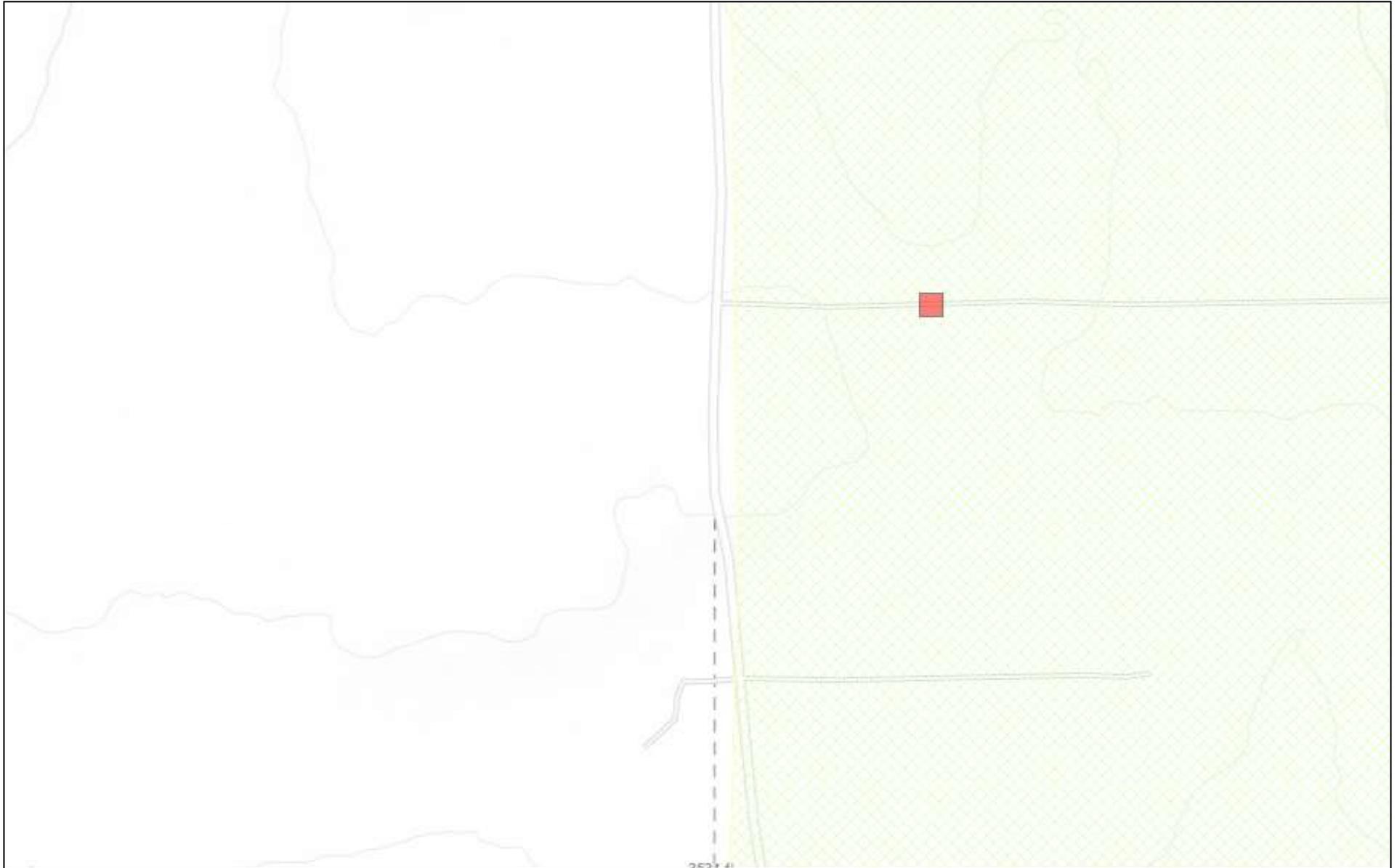


Page Contact Information: [New Mexico Water Data Maintainer](#)

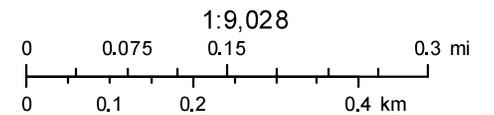
Page Last Modified: 2019-02-28 12:11:21 EST

33.71 1.31 nadww01

New Mexico NFHL Data



February 28, 2019



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

Appendix C



Certificate of Analysis Summary 645660

Tetra Tech- Midland, Midland, TX

Project Name: Concho - King Tut Federal #001H



Project Id:
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Dec-10-19 09:08 am
Report Date: 11-DEC-19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	645660-001	645660-002	645660-003	645660-004	645660-005	645660-006
	<i>Field Id:</i>	AH-1 (0'-1')	AH-1 (1'-1.5')	AH-1 (2'-2.5')	AH-1 (3'-3.5')	AH-1 (4'-4.5')	AH-1 (5'-5.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	Dec-10-19 11:00					
	<i>Analyzed:</i>	Dec-10-19 20:11					
	<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		<0.00399 0.00399					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Chloride by EPA 300	<i>Extracted:</i>	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00
	<i>Analyzed:</i>	Dec-10-19 11:53	Dec-10-19 11:58	Dec-10-19 12:03	Dec-10-19 12:19	Dec-10-19 12:25	Dec-10-19 12:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3640 25.1	153 4.97	10.4 4.95	34.2 4.95	19.4 4.98	7.09 5.00
TPH by SW8015 Mod	<i>Extracted:</i>	Dec-10-19 09:15					
	<i>Analyzed:</i>	Dec-10-19 12:25					
	<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					

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 645660

Tetra Tech- Midland, Midland, TX

Project Name: Concho - King Tut Federal #001H

Project Id:
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Dec-10-19 09:08 am
Report Date: 11-DEC-19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	645660-007	645660-008	645660-009	645660-010	645660-011	645660-012
	<i>Field Id:</i>	AH-2 (0'-1')	AH-2 (1'-1.5')	AH-3 (-0-1')	AH-3 (1'-1.5')	AH-3 (2'-2.5')	AH-3 (3'-3.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	Dec-10-19 11:00		Dec-10-19 11:00			
	<i>Analyzed:</i>	Dec-10-19 20:31		Dec-10-19 20:51			
	<i>Units/RL:</i>	mg/kg RL		mg/kg RL			
Benzene		<0.00202 0.00202		<0.00200 0.00200			
Toluene		<0.00202 0.00202		<0.00200 0.00200			
Ethylbenzene		<0.00202 0.00202		<0.00200 0.00200			
m,p-Xylenes		<0.00404 0.00404		<0.00399 0.00399			
o-Xylene		<0.00202 0.00202		<0.00200 0.00200			
Total Xylenes		<0.00202 0.00202		<0.00200 0.00200			
Total BTEX		<0.00202 0.00202		<0.00200 0.00200			
Chloride by EPA 300	<i>Extracted:</i>	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00
	<i>Analyzed:</i>	Dec-10-19 12:35	Dec-10-19 12:41	Dec-10-19 12:46	Dec-10-19 13:02	Dec-10-19 13:07	Dec-10-19 13:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		2130 24.8	171 4.99	<5.00 5.00	11.5 4.97	9.97 4.96	<4.95 4.95
TPH by SW8015 Mod	<i>Extracted:</i>	Dec-10-19 09:15		Dec-10-19 09:15			
	<i>Analyzed:</i>	Dec-10-19 12:43		Dec-10-19 13:02			
	<i>Units/RL:</i>	mg/kg RL		mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9		<49.8 49.8			
Diesel Range Organics (DRO)		<49.9 49.9		<49.8 49.8			
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9		<49.8 49.8			
Total TPH		<49.9 49.9		<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 645660

Tetra Tech- Midland, Midland, TX

Project Name: Concho - King Tut Federal #001H

Project Id:
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Dec-10-19 09:08 am
Report Date: 11-DEC-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	645660-013	645660-014	645660-015	645660-016	645660-017	645660-018
	Field Id:	AH-3 (4'-4.5')	AH-3 (5'-5.5')	AH-4 (0-1')	AH-4 (1'-1.5')	AH-4 (2'-2.5')	AH-4 (3'-3.5')
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00
BTEX by EPA 8021B	Extracted:			Dec-10-19 11:00			
	Analyzed:			Dec-10-19 21:11			
	Units/RL:			mg/kg RL			
Benzene				<0.00200 0.00200			
Toluene				<0.00200 0.00200			
Ethylbenzene				<0.00200 0.00200			
m,p-Xylenes				<0.00399 0.00399			
o-Xylene				<0.00200 0.00200			
Total Xylenes				<0.00200 0.00200			
Total BTEX				<0.00200 0.00200			
Chloride by EPA 300	Extracted:	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00	Dec-10-19 11:00
	Analyzed:	Dec-10-19 13:29	Dec-10-19 13:34	Dec-10-19 13:39	Dec-10-19 13:45	Dec-10-19 13:50	Dec-10-19 13:55
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<4.99 4.99	2950 25.2	7450 49.9	4660 24.9	9080 50.0	7320 50.3
TPH by SW8015 Mod	Extracted:			Dec-10-19 09:15			
	Analyzed:			Dec-10-19 13:21			
	Units/RL:			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 645660

Tetra Tech- Midland, Midland, TX

Project Name: Concho - King Tut Federal #001H



Project Id:
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Dec-10-19 09:08 am
Report Date: 11-DEC-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	645660-019	645660-020	645660-021	645660-022	645660-023	645660-024
	Field Id:	AH-4 (4'-4.5')	AH-4 (5'-5.5')	AH-5 (0-1')	AH-5 (1'-1.5')	AH-5 (2'-2.5')	AH-5 (3'-3.5')
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00
BTEX by EPA 8021B	Extracted:			Dec-10-19 11:00			
	Analyzed:			Dec-10-19 21:31			
	Units/RL:			mg/kg RL			
Benzene				<0.00198 0.00198			
Toluene				<0.00198 0.00198			
Ethylbenzene				<0.00198 0.00198			
m,p-Xylenes				<0.00396 0.00396			
o-Xylene				<0.00198 0.00198			
Total Xylenes				<0.00198 0.00198			
Total BTEX				<0.00198 0.00198			
Chloride by EPA 300	Extracted:	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10
	Analyzed:	Dec-10-19 15:50	Dec-10-19 15:56	Dec-10-19 16:01	Dec-10-19 16:06	Dec-10-19 16:22	Dec-10-19 16:28
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		6690 50.3	1680 25.1	5410 49.9	7310 50.4	3800 24.8	244 5.00
TPH by SW8015 Mod	Extracted:			Dec-10-19 09:15			
	Analyzed:			Dec-10-19 13:40			
	Units/RL:			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 645660

Tetra Tech- Midland, Midland, TX

Project Name: Concho - King Tut Federal #001H



Project Id:
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Dec-10-19 09:08 am
Report Date: 11-DEC-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	645660-025	645660-026	645660-027	645660-028	645660-029	645660-030
	Field Id:	AH-5 (4'-4.5')	AH-5 (5'-5.5')	AH-6 (0-1')	AH-6 (1'-1.5')	AH-6 (2'-2.5')	AH-6 (3'-3.5')
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00
BTEX by EPA 8021B	Extracted:			Dec-10-19 11:00			
	Analyzed:			Dec-10-19 21:51			
	Units/RL:			mg/kg RL			
Benzene				<0.00199 0.00199			
Toluene				<0.00199 0.00199			
Ethylbenzene				<0.00199 0.00199			
m,p-Xylenes				<0.00398 0.00398			
o-Xylene				<0.00199 0.00199			
Total Xylenes				<0.00199 0.00199			
Total BTEX				<0.00199 0.00199			
Chloride by EPA 300	Extracted:	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10
	Analyzed:	Dec-10-19 15:34	Dec-10-19 16:33	Dec-10-19 16:38	Dec-10-19 16:44	Dec-10-19 16:49	Dec-10-19 17:05
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		22.1 5.00	3330 24.9	2200 25.1	20.1 4.98	77.9 5.00	5.44 4.99
TPH by SW8015 Mod	Extracted:			Dec-10-19 09:15			
	Analyzed:			Dec-10-19 13:58			
	Units/RL:			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 645660

Tetra Tech- Midland, Midland, TX

Project Name: Concho - King Tut Federal #001H

Project Id:
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Dec-10-19 09:08 am
Report Date: 11-DEC-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	645660-031	645660-032	645660-033	645660-034	645660-035	645660-036
	Field Id:	AH-6 (4'-4.5')	AH-6 (5'-5.5')	AH-7 (0-1')	AH-8 (0-1')	AH-8 (1'-1.5')	AH-8 (2'-2.5')
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00
BTEX by EPA 8021B	Extracted:			Dec-10-19 11:00	Dec-10-19 11:00		
	Analyzed:			Dec-10-19 22:11	Dec-10-19 22:32		
	Units/RL:			mg/kg RL	mg/kg RL		
Benzene				<0.00200 0.00200	<0.00201 0.00201		
Toluene				<0.00200 0.00200	<0.00201 0.00201		
Ethylbenzene				<0.00200 0.00200	<0.00201 0.00201		
m,p-Xylenes				<0.00399 0.00399	<0.00402 0.00402		
o-Xylene				<0.00200 0.00200	<0.00201 0.00201		
Total Xylenes				<0.00200 0.00200	<0.00201 0.00201		
Total BTEX				<0.00200 0.00200	<0.00201 0.00201		
Chloride by EPA 300	Extracted:	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 13:10
	Analyzed:	Dec-10-19 17:10	Dec-10-19 17:26	Dec-10-19 17:32	Dec-10-19 17:37	Dec-10-19 17:43	Dec-10-19 17:48
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		5.20 5.05	5020 25.3	10700 50.5	7.17 5.03	14900 99.8	152 5.01
TPH by SW8015 Mod	Extracted:			Dec-10-19 09:15	Dec-10-19 09:15		
	Analyzed:			Dec-10-19 14:35	Dec-10-19 14:54		
	Units/RL:			mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)				<49.9 49.9	<49.8 49.8		
Diesel Range Organics (DRO)				<49.9 49.9	<49.8 49.8		
Motor Oil Range Hydrocarbons (MRO)				<49.9 49.9	<49.8 49.8		
Total TPH				<49.9 49.9	<49.8 49.8		

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Jessica Kramer

Jessica Kramer
 Project Assistant



Certificate of Analysis Summary 645660

Tetra Tech- Midland, Midland, TX

Project Name: Concho - King Tut Federal #001H



Project Id:
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Dec-10-19 09:08 am
Report Date: 11-DEC-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	645660-037	645660-038	645660-039	645660-040	645660-041	645660-042
	Field Id:	AH-8 (3'-3.5')	AH-8 (4'-4.5')	AH-8 (5'-5.5')	AH-9 (0-1')	AH-9 (1'-1.5')	AH-9(2'-2.5')
	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00
BTEX by EPA 8021B	Extracted:				Dec-10-19 11:00		
	Analyzed:				Dec-10-19 22:52		
	Units/RL:				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		
Chloride by EPA 300	Extracted:	Dec-10-19 13:10	Dec-10-19 13:10	Dec-10-19 16:40	Dec-10-19 16:40	Dec-10-19 16:40	Dec-10-19 16:40
	Analyzed:	Dec-10-19 17:53	Dec-10-19 17:59	Dec-10-19 17:26	Dec-10-19 17:33	Dec-10-19 17:39	Dec-10-19 17:46
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		127 4.95	167 5.04	3680 25.0	4550 24.8	5430 25.1	4790 24.9
TPH by SW8015 Mod	Extracted:				Dec-10-19 09:15		
	Analyzed:				Dec-10-19 15:12		
	Units/RL:				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 645660

Tetra Tech- Midland, Midland, TX

Project Name: Concho - King Tut Federal #001H

Project Id:
Contact: Mike Carmona
Project Location: Lea County, New Mexico

Date Received in Lab: Tue Dec-10-19 09:08 am
Report Date: 11-DEC-19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	645660-043	645660-044	645660-045			
	<i>Field Id:</i>	AH-9 (3'-3.5')	AH-10 (0-1')	AH-10 (1-1.5')			
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Dec-09-19 00:00	Dec-09-19 00:00	Dec-09-19 00:00			
BTEX by EPA 8021B	<i>Extracted:</i>		Dec-10-19 11:00				
	<i>Analyzed:</i>		Dec-10-19 23:12				
	<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				
Chloride by EPA 300	<i>Extracted:</i>	Dec-10-19 16:40	Dec-10-19 16:40	Dec-10-19 16:40			
	<i>Analyzed:</i>	Dec-10-19 18:06	Dec-10-19 17:06	Dec-10-19 18:12			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		2080 24.8	377 5.03	50.6 5.02			
TPH by SW8015 Mod	<i>Extracted:</i>		Dec-10-19 09:15				
	<i>Analyzed:</i>		Dec-10-19 15:31				
	<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

Analytical Report 645660

for Tetra Tech- Midland

Project Manager: Mike Carmona

Concho - King Tut Federal #001H

11-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)



11-DEC-19

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: XENCO Report No(s): **645660**

Concho - King Tut Federal #001H

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) 645660. 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. 645660 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,

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

Jessica Kramer

Project Assistant

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

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Sample Cross Reference 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 (0-1')	S	12-09-19 00:00		645660-001
AH-1 (1'-1.5')	S	12-09-19 00:00		645660-002
AH-1 (2'-2.5')	S	12-09-19 00:00		645660-003
AH-1 (3'-3.5')	S	12-09-19 00:00		645660-004
AH-1 (4'-4.5')	S	12-09-19 00:00		645660-005
AH-1 (5'-5.5')	S	12-09-19 00:00		645660-006
AH-2 (0-1')	S	12-09-19 00:00		645660-007
AH-2 (1'-1.5')	S	12-09-19 00:00		645660-008
AH-3 (-0-1')	S	12-09-19 00:00		645660-009
AH-3 (1'-1.5')	S	12-09-19 00:00		645660-010
AH-3 (2'-2.5')	S	12-09-19 00:00		645660-011
AH-3 (3'-3.5')	S	12-09-19 00:00		645660-012
AH-3 (4'-4.5')	S	12-09-19 00:00		645660-013
AH-3 (5'-5.5')	S	12-09-19 00:00		645660-014
AH-4 (0-1')	S	12-09-19 00:00		645660-015
AH-4 (1'-1.5')	S	12-09-19 00:00		645660-016
AH-4 (2'-2.5')	S	12-09-19 00:00		645660-017
AH-4 (3'-3.5')	S	12-09-19 00:00		645660-018
AH-4 (4'-4.5')	S	12-09-19 00:00		645660-019
AH-4 (5'-5.5')	S	12-09-19 00:00		645660-020
AH-5 (0-1')	S	12-09-19 00:00		645660-021
AH-5 (1'-1.5')	S	12-09-19 00:00		645660-022
AH-5 (2'-2.5')	S	12-09-19 00:00		645660-023
AH-5 (3'-3.5')	S	12-09-19 00:00		645660-024
AH-5 (4'-4.5')	S	12-09-19 00:00		645660-025
AH-5 (5'-5.5')	S	12-09-19 00:00		645660-026
AH-6 (0-1')	S	12-09-19 00:00		645660-027
AH-6 (1'-1.5')	S	12-09-19 00:00		645660-028
AH-6 (2'-2.5')	S	12-09-19 00:00		645660-029
AH-6 (3'-3.5')	S	12-09-19 00:00		645660-030
AH-6 (4'-4.5')	S	12-09-19 00:00		645660-031
AH-6 (5'-5.5')	S	12-09-19 00:00		645660-032
AH-7 (0-1')	S	12-09-19 00:00		645660-033
AH-8 (0-1')	S	12-09-19 00:00		645660-034
AH-8 (1'-1.5')	S	12-09-19 00:00		645660-035
AH-8 (2'-2.5')	S	12-09-19 00:00		645660-036
AH-8 (3'-3.5')	S	12-09-19 00:00		645660-037
AH-8 (4'-4.5')	S	12-09-19 00:00		645660-038
AH-8 (5'-5.5')	S	12-09-19 00:00		645660-039
AH-9 (0-1')	S	12-09-19 00:00		645660-040
AH-9 (1'-1.5')	S	12-09-19 00:00		645660-041
AH-9 (2'-2.5')	S	12-09-19 00:00		645660-042
AH-9 (3'-3.5')	S	12-09-19 00:00		645660-043



Sample Cross Reference 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

AH-10 (0-1')
AH-10 (1-1.5')

S 12-09-19 00:00
S 12-09-19 00:00

645660-044
645660-045



CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Concho - King Tut Federal #001H

Project ID:
Work Order Number(s): 645660

Report Date: 11-DEC-19
Date Received: 12/10/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3110094 BTEX by EPA 8021B

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



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-1 (0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-001 Date Collected: 12.09.19 00.00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 11.00 Basis: Wet Weight
 Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3640	25.1	mg/kg	12.10.19 11.53		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.10.19 12.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.10.19 12.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.10.19 12.25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.10.19 12.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	12.10.19 12.25	
o-Terphenyl	84-15-1	110	%	70-135	12.10.19 12.25	



Certificate of Analytical Results 645660



Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-001

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.10.19 20.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.10.19 20.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.10.19 20.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.10.19 20.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.10.19 20.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.10.19 20.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.10.19 20.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.10.19 20.11		
4-Bromofluorobenzene	460-00-4	100	%	70-130	12.10.19 20.11		



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-002

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	153	4.97	mg/kg	12.10.19 11.58		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-1 (2'-2.5')	Matrix: Soil	Date Received: 12.10.19 09.08
Lab Sample Id: 645660-003	Date Collected: 12.09.19 00.00	
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: CHE		% Moisture:
Analyst: CHE	Date Prep: 12.10.19 11.00	Basis: Wet Weight
Seq Number: 3110025		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.4	4.95	mg/kg	12.10.19 12.03		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-1 (3'-3.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-004

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.2	4.95	mg/kg	12.10.19 12.19		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-1 (4'-4.5')	Matrix: Soil	Date Received: 12.10.19 09.08
Lab Sample Id: 645660-005	Date Collected: 12.09.19 00.00	
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: CHE		% Moisture:
Analyst: CHE	Date Prep: 12.10.19 11.00	Basis: Wet Weight
Seq Number: 3110025		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.4	4.98	mg/kg	12.10.19 12.25		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-1 (5'-5.5')**

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-006

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.09	5.00	mg/kg	12.10.19 12.30		1



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-2 (0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-007 Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 11.00 Basis: Wet Weight
 Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2130	24.8	mg/kg	12.10.19 12.35		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.10.19 12.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.10.19 12.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.10.19 12.43	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.10.19 12.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.10.19 12.43	
o-Terphenyl	84-15-1	105	%	70-135	12.10.19 12.43	



Certificate of Analytical Results 645660



Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-007

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.10.19 20.31	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.10.19 20.31	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.10.19 20.31	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	12.10.19 20.31	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.10.19 20.31	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	12.10.19 20.31	U	1
Total BTEX		<0.00202	0.00202	mg/kg	12.10.19 20.31	U	1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99		%	70-130	12.10.19 20.31	
4-Bromofluorobenzene	460-00-4	105		%	70-130	12.10.19 20.31	



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-008

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	171	4.99	mg/kg	12.10.19 12.41		1



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-3 (-0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-009 Date Collected: 12.09.19 00.00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 11.00 Basis: Wet Weight
 Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	12.10.19 12.46	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.10.19 13.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.10.19 13.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.10.19 13.02	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	12.10.19 13.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.10.19 13.02	
o-Terphenyl	84-15-1	106	%	70-135	12.10.19 13.02	



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-009

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.10.19 20.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.10.19 20.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.10.19 20.51	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.10.19 20.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.10.19 20.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.10.19 20.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.10.19 20.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	12.10.19 20.51		
1,4-Difluorobenzene	540-36-3	101	%	70-130	12.10.19 20.51		



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-010

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.5	4.97	mg/kg	12.10.19 13.02		1



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-3 (2'-2.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-011

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.97	4.96	mg/kg	12.10.19 13.07		1



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-012

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	12.10.19 13.23	U	1



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-3 (4'-4.5')**

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-013

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	12.10.19 13.29	U	1



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-3 (5'-5.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-014

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2950	25.2	mg/kg	12.10.19 13.34		5



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-4 (0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-015 Date Collected: 12.09.19 00.00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 11.00 Basis: Wet Weight
 Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7450	49.9	mg/kg	12.10.19 13.39		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.10.19 13.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.10.19 13.21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.10.19 13.21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.10.19 13.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	12.10.19 13.21	
o-Terphenyl	84-15-1	103	%	70-135	12.10.19 13.21	



Certificate of Analytical Results 645660



Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-015

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.10.19 21.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.10.19 21.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.10.19 21.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.10.19 21.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.10.19 21.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.10.19 21.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.10.19 21.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	12.10.19 21.11		
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.10.19 21.11		



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-016

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4660	24.9	mg/kg	12.10.19 13.45		5



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-017

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9080	50.0	mg/kg	12.10.19 13.50		10



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-018

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110025

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7320	50.3	mg/kg	12.10.19 13.55		10



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-019

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6690	50.3	mg/kg	12.10.19 15.50		10



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-4 (5'-5.5')**

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-020

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1680	25.1	mg/kg	12.10.19 15.56		5



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-5 (0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-021 Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 13.10 Basis: Wet Weight
 Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5410	49.9	mg/kg	12.10.19 16.01		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.10.19 13.40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.10.19 13.40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.10.19 13.40	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.10.19 13.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	12.10.19 13.40	
o-Terphenyl	84-15-1	105	%	70-135	12.10.19 13.40	



Certificate of Analytical Results 645660



Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-021

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.10.19 21.31	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.10.19 21.31	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.10.19 21.31	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	12.10.19 21.31	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.10.19 21.31	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.10.19 21.31	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.10.19 21.31	U	1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99		%	70-130	12.10.19 21.31	
4-Bromofluorobenzene	460-00-4	102		%	70-130	12.10.19 21.31	



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-022

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7310	50.4	mg/kg	12.10.19 16.06		10



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-5 (2'-2.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-023

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3800	24.8	mg/kg	12.10.19 16.22		5



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-5 (3'-3.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-024

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	244	5.00	mg/kg	12.10.19 16.28		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-5 (4'-4.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-025

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.1	5.00	mg/kg	12.10.19 15.34		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-5 (5'-5.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-026

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3330	24.9	mg/kg	12.10.19 16.33		5



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-6 (0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-027 Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 13.10 Basis: Wet Weight
 Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2200	25.1	mg/kg	12.10.19 16.38		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.10.19 13.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.10.19 13.58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.10.19 13.58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.10.19 13.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	12.10.19 13.58	
o-Terphenyl	84-15-1	103	%	70-135	12.10.19 13.58	



Certificate of Analytical Results 645660



Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-027

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.10.19 21.51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.10.19 21.51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.10.19 21.51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.10.19 21.51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.10.19 21.51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.10.19 21.51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.10.19 21.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	12.10.19 21.51		
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.10.19 21.51		



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-028

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.1	4.98	mg/kg	12.10.19 16.44		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-029

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	77.9	5.00	mg/kg	12.10.19 16.49		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-6 (3'-3.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-030

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.44	4.99	mg/kg	12.10.19 17.05		1



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-6 (4'-4.5')	Matrix: Soil	Date Received: 12.10.19 09.08
Lab Sample Id: 645660-031	Date Collected: 12.09.19 00.00	
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: CHE		% Moisture:
Analyst: CHE	Date Prep: 12.10.19 13.10	Basis: Wet Weight
Seq Number: 3110029		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5.20	5.05	mg/kg	12.10.19 17.10		1



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-6 (5'-5.5')**

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-032

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5020	25.3	mg/kg	12.10.19 17.26		5



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-7 (0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-033 Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 13.10 Basis: Wet Weight
 Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10700	50.5	mg/kg	12.10.19 17.32		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.10.19 14.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.10.19 14.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.10.19 14.35	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.10.19 14.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.10.19 14.35	
o-Terphenyl	84-15-1	104	%	70-135	12.10.19 14.35	



Certificate of Analytical Results 645660



Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-033

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.10.19 22.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.10.19 22.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.10.19 22.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.10.19 22.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.10.19 22.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.10.19 22.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.10.19 22.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	12.10.19 22.11		
1,4-Difluorobenzene	540-36-3	100	%	70-130	12.10.19 22.11		



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-8 (0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-034 Date Collected: 12.09.19 00.00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 13.10 Basis: Wet Weight
 Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.17	5.03	mg/kg	12.10.19 17.37		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.10.19 14.54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.10.19 14.54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.10.19 14.54	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	12.10.19 14.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	12.10.19 14.54	
o-Terphenyl	84-15-1	104	%	70-135	12.10.19 14.54	



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-034

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	12.10.19 22.32	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	12.10.19 22.32	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	12.10.19 22.32	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	12.10.19 22.32	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	12.10.19 22.32	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	12.10.19 22.32	U	1
Total BTEX		<0.00201	0.00201	mg/kg	12.10.19 22.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	12.10.19 22.32		
4-Bromofluorobenzene	460-00-4	102	%	70-130	12.10.19 22.32		



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Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-035

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14900	99.8	mg/kg	12.10.19 17.43		20



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-036

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	152	5.01	mg/kg	12.10.19 17.48		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-037

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	127	4.95	mg/kg	12.10.19 17.53		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-8 (4'-4.5')**

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-038

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 13.10

Basis: Wet Weight

Seq Number: 3110029

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	167	5.04	mg/kg	12.10.19 17.59		1



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-8 (5'-5.5')**

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-039

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 16.40

Basis: Wet Weight

Seq Number: 3110034

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3680	25.0	mg/kg	12.10.19 17.26		5



Certificate of Analytical Results 645660



Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-9 (0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-040 Date Collected: 12.09.19 00.00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 16.40 Basis: Wet Weight
 Seq Number: 3110034

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4550	24.8	mg/kg	12.10.19 17.33		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.10.19 15.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.10.19 15.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.10.19 15.12	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.10.19 15.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	12.10.19 15.12	
o-Terphenyl	84-15-1	104	%	70-135	12.10.19 15.12	



Certificate of Analytical Results 645660



Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-040

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	12.10.19 22.52	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	12.10.19 22.52	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	12.10.19 22.52	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	12.10.19 22.52	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	12.10.19 22.52	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	12.10.19 22.52	U	1
Total BTEX		<0.00198	0.00198	mg/kg	12.10.19 22.52	U	1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98		%	70-130	12.10.19 22.52	
4-Bromofluorobenzene	460-00-4	98		%	70-130	12.10.19 22.52	



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-9 (1'-1.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-041

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 16.40

Basis: Wet Weight

Seq Number: 3110034

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5430	25.1	mg/kg	12.10.19 17.39		5



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: AH-9(2'-2.5')

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-042

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 16.40

Basis: Wet Weight

Seq Number: 3110034

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4790	24.9	mg/kg	12.10.19 17.46		5



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-9 (3'-3.5')**

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-043

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 16.40

Basis: Wet Weight

Seq Number: 3110034

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2080	24.8	mg/kg	12.10.19 18.06		5



Certificate of Analytical Results 645660



Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-10 (0-1')** Matrix: Soil Date Received: 12.10.19 09.08
 Lab Sample Id: 645660-044 Date Collected: 12.09.19 00.00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.10.19 16.40 Basis: Wet Weight
 Seq Number: 3110034

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	377	5.03	mg/kg	12.10.19 17.06		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 12.10.19 09.15 Basis: Wet Weight
 Seq Number: 3109957

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	12.10.19 15.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	12.10.19 15.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	12.10.19 15.31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	12.10.19 15.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	12.10.19 15.31	
o-Terphenyl	84-15-1	107	%	70-135	12.10.19 15.31	



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

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

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-044

Date Collected: 12.09.19 00.00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 12.10.19 11.00

Basis: Wet Weight

Seq Number: 3110094

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.10.19 23.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.10.19 23.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.10.19 23.12	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	12.10.19 23.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.10.19 23.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.10.19 23.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.10.19 23.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	12.10.19 23.12		
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.10.19 23.12		



Certificate of Analytical Results 645660

Tetra Tech- Midland, Midland, TX

Concho - King Tut Federal #001H

Sample Id: **AH-10 (1-1.5')**

Matrix: Soil

Date Received: 12.10.19 09.08

Lab Sample Id: 645660-045

Date Collected: 12.09.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 12.10.19 16.40

Basis: Wet Weight

Seq Number: 3110034

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.6	5.02	mg/kg	12.10.19 18.12		1



Flagging Criteria



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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Tetra Tech- Midland
Concho - King Tut Federal #001H

Analytical Method: Chloride by EPA 300

Seq Number: 3110025

MB Sample Id: 7692059-1-BLK

Matrix: Solid

LCS Sample Id: 7692059-1-BKS

Prep Method: E300P

Date Prep: 12.10.19

LCSD Sample Id: 7692059-1-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	242	97	244	98	90-110	1	20	mg/kg	12.10.19 11:21	

Analytical Method: Chloride by EPA 300

Seq Number: 3110029

MB Sample Id: 7692080-1-BLK

Matrix: Solid

LCS Sample Id: 7692080-1-BKS

Prep Method: E300P

Date Prep: 12.10.19

LCSD Sample Id: 7692080-1-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	238	95	241	96	90-110	1	20	mg/kg	12.10.19 15:24	

Analytical Method: Chloride by EPA 300

Seq Number: 3110034

MB Sample Id: 7692108-1-BLK

Matrix: Solid

LCS Sample Id: 7692108-1-BKS

Prep Method: E300P

Date Prep: 12.10.19

LCSD Sample Id: 7692108-1-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	246	98	247	99	90-110	0	20	mg/kg	12.10.19 16:53	

Analytical Method: Chloride by EPA 300

Seq Number: 3110025

Parent Sample Id: 645629-001

Matrix: Soil

MS Sample Id: 645629-001 S

Prep Method: E300P

Date Prep: 12.10.19

MSD Sample Id: 645629-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.99	248	234	94	236	94	90-110	1	20	mg/kg	12.10.19 11:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3110025

Parent Sample Id: 645660-009

Matrix: Soil

MS Sample Id: 645660-009 S

Prep Method: E300P

Date Prep: 12.10.19

MSD Sample Id: 645660-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3.57	250	253	100	254	100	90-110	0	20	mg/kg	12.10.19 12:51	

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
Concho - King Tut Federal #001H

Analytical Method: Chloride by EPA 300

Seq Number: 3110029

Parent Sample Id: 645660-025

Matrix: Soil

MS Sample Id: 645660-025 S

Prep Method: E300P

Date Prep: 12.10.19

MSD Sample Id: 645660-025 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	22.1	250	262	96	263	96	90-110	0	20	mg/kg	12.10.19 15:40	

Analytical Method: Chloride by EPA 300

Seq Number: 3110029

Parent Sample Id: 645660-029

Matrix: Soil

MS Sample Id: 645660-029 S

Prep Method: E300P

Date Prep: 12.10.19

MSD Sample Id: 645660-029 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	77.9	250	332	102	332	102	90-110	0	20	mg/kg	12.10.19 16:54	

Analytical Method: Chloride by EPA 300

Seq Number: 3110034

Parent Sample Id: 645660-044

Matrix: Soil

MS Sample Id: 645660-044 S

Prep Method: E300P

Date Prep: 12.10.19

MSD Sample Id: 645660-044 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	377	252	610	92	611	93	90-110	0	20	mg/kg	12.10.19 17:13	

Analytical Method: Chloride by EPA 300

Seq Number: 3110034

Parent Sample Id: 645683-002

Matrix: Soil

MS Sample Id: 645683-002 S

Prep Method: E300P

Date Prep: 12.10.19

MSD Sample Id: 645683-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	316	249	549	94	547	93	90-110	0	20	mg/kg	12.10.19 18:46	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3109957

MB Sample Id: 7692069-1-BLK

Matrix: Solid

LCS Sample Id: 7692069-1-BKS

Prep Method: SW8015P

Date Prep: 12.10.19

LCSD Sample Id: 7692069-1-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	974	97	1110	111	70-135	13	20	mg/kg	12.10.19 09:53	
Diesel Range Organics (DRO)	<15.0	1000	1020	102	1180	118	70-135	15	20	mg/kg	12.10.19 09:53	

Surrogate

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		130		128		70-135	%	12.10.19 09:53
o-Terphenyl	94		118		129		70-135	%	12.10.19 09:53

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
Concho - King Tut Federal #001H

Analytical Method: TPH by SW8015 Mod
Seq Number: 3109957

Matrix: Solid
MB Sample Id: 7692069-1-BLK

Prep Method: SW8015P
Date Prep: 12.10.19

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.10.19 09:35	

Analytical Method: TPH by SW8015 Mod
Seq Number: 3109957
Parent Sample Id: 645655-001

Matrix: Soil
MS Sample Id: 645655-001 S

Prep Method: SW8015P
Date Prep: 12.10.19
MSD Sample Id: 645655-001 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	1230	123	1240	124	70-135	1	20	mg/kg	12.10.19 10:50	
Diesel Range Organics (DRO)	44.2	997	1260	122	1270	123	70-135	1	20	mg/kg	12.10.19 10:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		124		70-135	%	12.10.19 10:50
o-Terphenyl	125		129		70-135	%	12.10.19 10:50

Analytical Method: BTEX by EPA 8021B
Seq Number: 3110094
MB Sample Id: 7692060-1-BLK

Matrix: Solid
LCS Sample Id: 7692060-1-BKS

Prep Method: SW5030B
Date Prep: 12.10.19
LCSD Sample Id: 7692060-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.103	103	0.107	107	70-130	4	35	mg/kg	12.10.19 18:11	
Toluene	<0.000456	0.100	0.100	100	0.102	102	70-130	2	35	mg/kg	12.10.19 18:11	
Ethylbenzene	<0.000565	0.100	0.0984	98	0.0986	99	70-130	0	35	mg/kg	12.10.19 18:11	
m,p-Xylenes	<0.00101	0.200	0.201	101	0.202	101	70-130	0	35	mg/kg	12.10.19 18:11	
o-Xylene	<0.000344	0.100	0.0985	99	0.101	101	70-130	3	35	mg/kg	12.10.19 18:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		89		95		70-130	%	12.10.19 18:11
4-Bromofluorobenzene	95		99		108		70-130	%	12.10.19 18:11

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
Concho - King Tut Federal #001H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3110094

Parent Sample Id: 645660-001

Matrix: Soil

MS Sample Id: 645660-001 S

Prep Method: SW5030B

Date Prep: 12.10.19

MSD Sample Id: 645660-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000382	0.0992	0.0965	97	0.0961	96	70-130	0	35	mg/kg	12.10.19 18:51	
Toluene	0.000489	0.0992	0.0935	94	0.0916	91	70-130	2	35	mg/kg	12.10.19 18:51	
Ethylbenzene	<0.000560	0.0992	0.0906	91	0.0884	88	70-130	2	35	mg/kg	12.10.19 18:51	
m,p-Xylenes	<0.00101	0.198	0.185	93	0.179	90	70-130	3	35	mg/kg	12.10.19 18:51	
o-Xylene	0.000369	0.0992	0.0923	93	0.0897	89	70-130	3	35	mg/kg	12.10.19 18:51	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		103		70-130	%	12.10.19 18:51
4-Bromofluorobenzene	111		112		70-130	%	12.10.19 18:51

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.

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

1015000

Client Name: Concho
Project Name: King Tut Federal #001H
Project Location: (county, state) Lea County, New Mexico
Project #:
Invoice to: Ike Tavaréz
Receiving Laboratory: Xenco
Sampler Signature: Devin Dominguez
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		DATE	TIME	MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)
		YEAR: 2019				WATER	SOIL	HCL	HNO ₃	ICE	None		
	AH-1 (0-1')			12/9/2019		X	X	X	X	X	X	1	N
	AH-1 (1'-1.5')			12/9/2019		X	X	X	X	X	X	1	N
	AH-1 (2'-2.5')			12/9/2019		X	X	X	X	X	X	1	N
	AH-1 (3'-3.5')			12/9/2019		X	X	X	X	X	X	1	N
	AH-1 (4'-4.5')			12/9/2019		X	X	X	X	X	X	1	N
	AH-1 (5'-5.5')			12/9/2019		X	X	X	X	X	X	1	N
	AH-2 (0-1')			12/9/2019		X	X	X	X	X	X	1	N
	AH-2 (1'-1.5')			12/9/2019		X	X	X	X	X	X	1	N
	AH-3 (0-1')			12/9/2019		X	X	X	X	X	X	1	N
	AH-3 (1'-1.5')			12/9/2019		X	X	X	X	X	X	1	N

Relinquished by: *[Signature]* Date: 12/10/19 Time: 0900
Received by: *[Signature]* Date: 12/10/19 Time: 0900

Site Manager: Mike Carmona
Project #:
Sampler Signature: Devin Dominguez

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 checked="" 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"/>	TPH 8015R	
<input type="checkbox"/>	Hold	

LAB USE ONLY
Sample Temperature: *0-3*

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 Custody Record



Tetra Tech, Inc.

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

10451000

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

Project Name: **King Tut Federal #001H**

Project Location: (county, state) **Lea County, New Mexico** Project #:

Invoice to: **Ike Tavaraz**

Receiving Laboratory: **Xenco** Sampler Signature: **Devin Dominguez**

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)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		YEAR: 2019	DATE	TIME	WATER	SOIL	HCL	HNO ₃				ICE
	AH-3 (2-2.5)		12/9/2019		X					1	N	BTEX 8021B BTEX 8260B
	AH-3 (3-3.5)		12/9/2019		X					1	N	TPH TX1005 (Ext to C35)
	AH-3 (4-4.5)		12/9/2019		X					1	N	TPH 8015M (GRO - DRO - ORO - MRO)
	AH-3 (5-5.5)		12/9/2019		X					1	N	PAH 8270C
	AH-4 (0-1)		12/9/2019		X					1	N	Total Metals Ag As Ba Cd Cr Pb Se Hg
	AH-4 (1-1.5)		12/9/2019		X					1	N	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	AH-4 (2-2.5)		12/9/2019		X					1	N	TCLP Volatiles
	AH-4 (3-3.5)		12/9/2019		X					1	N	TCLP Semi Volatiles
	AH-4 (4-4.5)		12/9/2019		X					1	N	RCI
	AH-4 (5-5.5)		12/9/2019		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: *[Signature]* Date: **12/10/19** Time: _____

Relinquished by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: *[Signature]* Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr **72 hr**

Rush Charges Authorized

Special Report Limits or 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) 682-4559
Fax (432) 682-3946

WJSUUC

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

Project Name: **King Tut Federal #001H**

Project Location: (county, state) **Lea County, New Mexico** Project #:

Invoice to: **Ike Tavarez**

Receiving Laboratory: **Xenco** Sampler Signature: **Devin Dominguez**

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)	ANALYSIS REQUEST (Circle or Specify Method No.)	
		YEAR-2019	DATE		TIME	WATER	SOIL	HCL				HNO ₃
	AH-5 (0-1')		12/9/2019		X					1	N	BTEX 8021B BTEX 8260B
	AH-5 (1'-1.5')		12/9/2019		X					1	N	TPH TX1005 (Ext to C35)
	AH-5 (2'-2.5')		12/9/2019		X					1	N	TPH 8015M (GRO - DRO - ORO - MRO)
	AH-5 (3'-3.5')		12/9/2019		X					1	N	PAH 8270C
	AH-5 (4'-4.5')		12/9/2019		X					1	N	Total Metals Ag As Ba Cd Cr Pb Se Hg
	AH-5 (5'-5.5')		12/9/2019		X					1	N	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	AH-6 (0-1')		12/9/2019		X					1	N	TCLP Volatiles
	AH-6 (1'-1.5')		12/9/2019		X					1	N	TCLP Semi Volatiles
	AH-6 (2'-2.5')		12/9/2019		X					1	N	RCI
	AH-6 (3'-3.5')		12/9/2019		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

Abandoned by: *[Signature]* Date: **12/10/19** Time: **12:00**

Received by: *[Signature]* Date: **12/10/19** Time: **12:00**

Abandoned by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr **(2 hr)**

Rush Charges Authorized

Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking # _____

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

10452000

Client Name: Concho Site Manager: Mike Carmona
 Project Name: King Tut Federal #001H
 Project Location: (county, state) Lea County, New Mexico Project #:
 Invoice to: Ike Tavarez
 Receiving Laboratory: Xenco Sampler Signature: Devin Dominguez
 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: 2019	DATE	TIME	WATER	SOIL	HCL	HNO ₃			ICE
	AH-6 (4'-4.5')		12/9/2019		X					1	N
	AH-6 (5'-5.5')		12/9/2019		X					1	N
	AH-7 (0-1')		12/9/2019		X					1	N
	AH-8 (0-1')		12/9/2019		X					1	N
	AH-8 (1'-1.5')		12/9/2019		X					1	N
	AH-8 (2'-2.5')		12/9/2019		X					1	N
	AH-8 (3'-3.5')		12/9/2019		X					1	N
	AH-8 (4'-4.5')		12/9/2019		X					1	N
	AH-8 (5'-5.5')		12/9/2019		X					1	N
	AH-9 (0-1')		12/9/2019		X					1	N

Abandoned by: [Signature] Date: 12/10/19 Time: []
 Received by: [Signature] Date: [] Time: []

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

(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

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

TPH SLUW

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

Project Name: **King Tut Federal #001H** Project #:

Project Location: (county, state) **Lea County, New Mexico**

Invoice to: **Ike Tavarez**

Receiving Laboratory: **Xenco** Sampler Signature: **Devin Dominguez**

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)	
		YEAR: 2019	DATE	TIME	WATER	SOIL	PRESERVATIVE METHOD				
							HCL	HNO ₃			ICE
	AH-9 (1'-1.5')		12/9/2019		X		X			1	N
	AH-9 (2'-2.5')		12/9/2019		X		X			1	N
	AH-9 (3'-3.5')		12/9/2019		X		X			1	N
	AH-10 (0-1')		12/9/2019		X		X			1	N
	AH-10 (1'-1.5')		12/9/2019		X		X			1	N

LAB USE ONLY

REMARKS: STANDARD RUSH: Same Day 24 hr 48 hr **72 hr**

Rush Charges Authorized Special Report Limits or TRRP Report

(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



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 12/10/2019 09:08:00 AM

Work Order #: 645660

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
#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: 12/10/2019
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 12/10/2019
Jessica Kramer



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

February 11, 2020

MIKE CARMONA

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: KING TUT #001H

Enclosed are the results of analyses for samples received by the laboratory on 02/10/20 13:10.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 1 COMP 2' (H000383-01)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	216	108	200	2.95		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	212	106	200	4.98		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 104 % 37.6-147

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 2 COMP 2' (H000383-02)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	216	108	200	2.95		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	212	106	200	4.98		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 105 % 41-142

Surrogate: 1-Chlorooctadecane 107 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 3 COMP 2' (H000383-03)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69	
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88	
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19	
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08	
Total BTEX	<0.300	0.300	02/10/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/10/2020	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	216	108	200	2.95	
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	212	106	200	4.98	
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND					

Surrogate: 1-Chlorooctane 104 % 41-142

Surrogate: 1-Chlorooctadecane 107 % 37.6-147

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 4 COMP 2' (H000383-04)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 93.5 % 41-142

Surrogate: 1-Chlorooctadecane 98.4 % 37.6-147

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 5 COMP 2' (H000383-05)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 95.4 % 41-142

Surrogate: 1-Chlorooctadecane 99.1 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 6 COMP 2' (H000383-06)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 93.2 % 41-142

Surrogate: 1-Chlorooctadecane 97.7 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 7 COMP 2' (H000383-07)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 94.3 % 41-142

Surrogate: 1-Chlorooctadecane 99.4 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 8 COMP 2' (H000383-08)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 97.6 % 41-142

Surrogate: 1-Chlorooctadecane 102 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 9 COMP 4'-4.5' (H000383-09)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3760	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 97.9 % 41-142

Surrogate: 1-Chlorooctadecane 102 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 10 COMP 4'-4.5' (H000383-10)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3400	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 94.1 % 41-142

Surrogate: 1-Chlorooctadecane 99.1 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 11 COMP 4'-4.5' (H000383-11)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1600	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 92.7 % 41-142

Surrogate: 1-Chlorooctadecane 96.8 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 12 COMP 4'-4.5' (H000383-12)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	02/10/2020	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 94.1 % 41-142

Surrogate: 1-Chlorooctadecane 96.8 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 13 COMP 4'-4.5' (H000383-13)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1380	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 93.7 % 41-142

Surrogate: 1-Chlorooctadecane 97.1 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 14 COMP 4'-4.5' (H000383-14)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 94.4 % 41-142

Surrogate: 1-Chlorooctadecane 99.2 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 15 COMP 4'-4.5' (H000383-15)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1280	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 95.0 % 41-142

Surrogate: 1-Chlorooctadecane 100 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 16 COMP 1.5' (H000383-16)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 92.7 % 41-142

Surrogate: 1-Chlorooctadecane 96.1 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 17 COMP 3.5' (H000383-17)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 93.7 % 41-142

Surrogate: 1-Chlorooctadecane 97.7 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 18 COMP 3.5' (H000383-18)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 95.1 % 41-142

Surrogate: 1-Chlorooctadecane 99.1 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 19 COMP 3.5' (H000383-19)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69		
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 95.1 % 41-142

Surrogate: 1-Chlorooctadecane 98.8 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 20 COMP 3.5' (H000383-20)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/10/2020	ND	1.86	92.9	2.00	4.69	
Toluene*	<0.050	0.050	02/10/2020	ND	1.89	94.7	2.00	4.88	
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.93	96.5	2.00	4.19	
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.61	93.4	6.00	4.08	
Total BTEX	<0.300	0.300	02/10/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/11/2020	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	198	99.1	200	1.92	
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	188	94.1	200	0.119	
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND					

Surrogate: 1-Chlorooctane 95.2 % 41-142

Surrogate: 1-Chlorooctadecane 98.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 21 COMP 3.5' (H000383-21)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 93.8 % 41-142

Surrogate: 1-Chlorooctadecane 98.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 22 COMP 1.5' (H000383-22)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 97.2 % 37.6-147

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 23 COMP 1.5' (H000383-23)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	198	99.1	200	1.92		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	188	94.1	200	0.119		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 95.7 % 41-142

Surrogate: 1-Chlorooctadecane 99.6 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 24 COMP 1.5' (H000383-24)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 90.5 % 41-142

Surrogate: 1-Chlorooctadecane 93.3 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 25 COMP 1.5' (H000383-25)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79	
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51	
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11	
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74	
Total BTEX	<0.300	0.300	02/10/2020	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	02/11/2020	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56	
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND					

Surrogate: 1-Chlorooctane 94.9 % 41-142

Surrogate: 1-Chlorooctadecane 97.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 26 COMP 3' (H000383-26)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 93.4 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: BOTTOMHOLE - 27 COMP 3' (H000383-27)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 94.7 % 41-142

Surrogate: 1-Chlorooctadecane 97.2 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: NSW - 1 COMP 2' (H000383-28)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 93.5 % 41-142

Surrogate: 1-Chlorooctadecane 96.8 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: NSW - 2 COMP 4'-4.5' (H000383-29)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 89.2 % 41-142

Surrogate: 1-Chlorooctadecane 91.8 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: NSW - 3 COMP 1.5' (H000383-30)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 94.8 % 41-142

Surrogate: 1-Chlorooctadecane 99.0 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: NSW - 4 COMP 3.5' (H000383-31)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 91.4 % 41-142

Surrogate: 1-Chlorooctadecane 93.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: NSW - 5 COMP 1.5' (H000383-32)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	02/11/2020	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 90.3 % 41-142

Surrogate: 1-Chlorooctadecane 93.3 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: NSW - 6 COMP 3' (H000383-33)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 89.6 % 41-142

Surrogate: 1-Chlorooctadecane 93.1 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: SSW - 1 COMP 2' (H000383-34)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 90.8 % 41-142

Surrogate: 1-Chlorooctadecane 94.6 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: SSW - 2 COMP 4'-4.5' (H000383-35)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 93.3 % 41-142

Surrogate: 1-Chlorooctadecane 97.2 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: SSW - 3 COMP 1.5' (H000383-36)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/10/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/10/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/10/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/10/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/10/2020	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 91.8 % 41-142

Surrogate: 1-Chlorooctadecane 94.2 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: SSW - 4 COMP 3.5' (H000383-37)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/11/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 90.0 % 41-142

Surrogate: 1-Chlorooctadecane 93.1 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: SSW - 5 COMP 1.5' (H000383-38)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/11/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/11/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 93.1 % 41-142

Surrogate: 1-Chlorooctadecane 96.4 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: SSW - 6 COMP 3' (H000383-39)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/11/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 90.1 % 41-142

Surrogate: 1-Chlorooctadecane 93.2 % 37.6-147

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: WSW - 1 COMP 2' (H000383-40)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.81	90.6	2.00	6.79		
Toluene*	<0.050	0.050	02/11/2020	ND	1.84	92.2	2.00	7.51		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.87	93.3	2.00	7.11		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.52	92.0	6.00	6.74		
Total BTEX	<0.300	0.300	02/11/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 92.8 % 41-142

Surrogate: 1-Chlorooctadecane 95.7 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: WSW - 2 COMP 4'-4.5' (H000383-41)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 82.3 % 41-142

Surrogate: 1-Chlorooctadecane 85.2 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: WSW - 3 COMP 4'-4.5' (H000383-42)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42	
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76	
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50	
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37	
Total BTEX	<0.300	0.300	02/11/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/11/2020	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	200	99.8	200	3.56	
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	179	89.6	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND					

Surrogate: 1-Chlorooctane 90.5 % 41-142

Surrogate: 1-Chlorooctadecane 94.0 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: WSW - 4 COMP 1.5' (H000383-43)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	200	99.8	200	3.56		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	179	89.6	200	3.53		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 83.8 % 41-142

Surrogate: 1-Chlorooctadecane 85.8 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: WSW - 5 COMP 3.5' (H000383-44)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	224	112	200	5.42		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	227	114	200	10.1		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 97.0 % 41-142

Surrogate: 1-Chlorooctadecane 101 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: WSW - 6 COMP 1.5' (H000383-45)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	224	112	200	5.42		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	227	114	200	10.1		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 94.8 % 41-142

Surrogate: 1-Chlorooctadecane 99.0 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: WSW - 7 COMP 3' (H000383-46)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	224	112	200	5.42		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	227	114	200	10.1		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 93.9 % 41-142

Surrogate: 1-Chlorooctadecane 96.7 % 37.6-147

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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: ESW - 1 COMP 2' (H000383-47)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2020	ND	224	112	200	5.42		
DRO >C10-C28*	<10.0	10.0	02/10/2020	ND	227	114	200	10.1		
EXT DRO >C28-C36	<10.0	10.0	02/10/2020	ND						

Surrogate: 1-Chlorooctane 98.7 % 41-142

Surrogate: 1-Chlorooctadecane 99.8 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: ESW - 2 COMP 4'-4.5' (H000383-48)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	224	112	200	5.42		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	227	114	200	10.1		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 95.1 % 41-142

Surrogate: 1-Chlorooctadecane 96.3 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: ESW - 3 COMP 1.5' (H000383-49)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	224	112	200	5.42		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	227	114	200	10.1		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 96.1 % 41-142

Surrogate: 1-Chlorooctadecane 99.8 % 37.6-147

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: ESW - 4 COMP 3.5' (H000383-50)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	224	112	200	5.42		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	227	114	200	10.1		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 95.6 % 41-142

Surrogate: 1-Chlorooctadecane 98.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: ESW - 5 COMP 1.5' (H000383-51)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	224	112	200	5.42		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	227	114	200	10.1		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 96.1 % 41-142

Surrogate: 1-Chlorooctadecane 99.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	02/10/2020	Sampling Date:	02/10/2020
Reported:	02/11/2020	Sampling Type:	Soil
Project Name:	KING TUT #001H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: ESW - 6 COMP 3' (H000383-52)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/11/2020	ND	1.85	92.6	2.00	3.42		
Toluene*	<0.050	0.050	02/11/2020	ND	1.88	94.2	2.00	3.76		
Ethylbenzene*	<0.050	0.050	02/11/2020	ND	1.91	95.7	2.00	3.50		
Total Xylenes*	<0.150	0.150	02/11/2020	ND	5.56	92.7	6.00	3.37		
Total BTEX	<0.300	0.300	02/11/2020	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/11/2020	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/11/2020	ND	224	112	200	5.42		
DRO >C10-C28*	<10.0	10.0	02/11/2020	ND	227	114	200	10.1		
EXT DRO >C28-C36	<10.0	10.0	02/11/2020	ND						

Surrogate: 1-Chlorooctane 91.4 % 41-142

Surrogate: 1-Chlorooctadecane 96.3 % 37.6-147

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Notes and Definitions

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

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Celey D. Keene, Lab Director/Quality Manager

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: Concho Site Manager: Mike Carmona
 Project Name: King Tut #001H
 Project Location: Lea County, New Mexico Project #:
 Invoice to: Ike Tavaraz
 Receiving Laboratory: Cardinal Lab Sampler Signature: Devin Dominguez
 Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE			None
1	Bottomhole-1 Comp 2'	2/10/2020		X				X		1	N
2	Bottomhole-2 Comp 2'	2/10/2020		X				X		1	N
3	Bottomhole-3 Comp 2'	2/10/2020		X				X		1	N
4	Bottomhole-4 Comp 2'	2/10/2020		X				X		1	N
5	Bottomhole-5 Comp 2'	2/10/2020		X				X		1	N
6	Bottomhole-6 Comp 2'	2/10/2020		X				X		1	N
7	Bottomhole-7 Comp 2'	2/10/2020		X				X		1	N
8	Bottomhole-8 Comp 2'	2/10/2020		X				X		1	N
9	Bottomhole-9 Comp 4'-4.5'	2/10/2020		X				X		1	N
10	Bottomhole-10 Comp 4'-4.5'	2/10/2020		X				X		1	N

Relinquished by: Date: 2/10/2020 Time: 2:10:30
 Relinquished by: Date: 2/10/2020 Time: 2:10:30
 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: #113
 REMARKS:
 STANDARD
 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 #:



Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 692-4559
Fax (432) 692-3946

Analysis Request of Chain of Custody Record

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

Project Name: **King Tut #001H**

Project Location: **Lea County, New Mexico** (county, state)

Project #: _____

Invoice to: **Ike Tavares**

Receiving Laboratory: **Cardinal Lab** Sampler Signature: **Devin Dominguez**

Comments: _____

Relinquished by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: **2/10/2020** Time: _____

Relinquished by: _____ Date: _____ Time: _____

YEAR: 2020	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO ₃		
	2/10/2020		X				1	N
	2/10/2020		X				1	N
	2/10/2020		X				1	N
	2/10/2020		X				1	N
	2/10/2020		X				1	N
	2/10/2020		X				1	N
	2/10/2020		X				1	N
	2/10/2020		X				1	N
	2/10/2020		X				1	N
	2/10/2020		X				1	N

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: **#113**

0.2°C

(Circle) HAND DELIVERED FEDEX UPS Tracking # _____

ORIGINAL COPY

ANALYSIS REQUEST
(Circle or Specify Method No.)

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

09 jo 85 e9aD

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 692-4599
Fax (432) 692-3946

Client Name: Concho Site Manager: Mike Carmona

Project Name: King Tut #001H

Project Location: Lea County, New Mexico Project #:

Invoice to: Ike Tavaraz

Receiving Laboratory: Cardinal Lab Sampler Signature: Devin Dominguez

Comments:

SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE		
31 NSW-4 Comp 3.5'	2/10/2020		X						1 N
32 NSW-5 Comp 1.5'	2/10/2020		X						1 N
33 NSW-6 Comp 3'	2/10/2020		X						1 N
34 SSW-1 Comp 2'	2/10/2020		X						1 N
35 SSW-2 Comp 4'-4.5'	2/10/2020		X						1 N
36 SSW-3 Comp 1.5'	2/10/2020		X						1 N
37 SSW-4 Comp 3.5'	2/10/2020		X						1 N
38 SSW-5 Comp 1.5'	2/10/2020		X						1 N
39 SSW-6 Comp 3'	2/10/2020		X						1 N
40 WSW-1 Comp 2'	2/10/2020		X						1 N

Relinquished by: *[Signature]* Date: 2/10/2020 Time: 1310

Received by: *[Signature]* Date: 2-10-20 Time: 1310

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	

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: #113

0.2°C

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland Texas 79701
Tel (432) 682-4559
Fax (432) 582-3946

Client Name: Concho Site Manager: Mike Carmona
 Project Name: King Tut #001H
 Project Location: Lea County, New Mexico Project #:
 (county, state)
 Invoice to: Ike Tavaraz
 Receiving Laboratory: Cardinal Lab Sampler Signature: Devin Dominguez
 Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)
		YEAR: 2020	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE		
411	WSW-2 Comp 4'-4.5'		2/10/2020		X					X	N
412	WSW-3 Comp 4'-4.5'		2/10/2020		X					X	N
413	WSW-4 Comp 1.5'		2/10/2020		X					X	N
414	WSW-5 Comp 3.5'		2/10/2020		X					X	N
415	WSW-6 Comp 1.5'		2/10/2020		X					X	N
416	WSW-7 Comp 3'		2/10/2020		X					X	N
417	ESW-1 Comp 2'		2/10/2020		X					X	N
418	ESW-2 Comp 4'-4.5'		2/10/2020		X					X	N
419	ESW-3 Comp 1.5'		2/10/2020		X					X	N
510	ESW-4 Comp 3.5'		2/10/2020		X					X	N

Relinquished by: *[Signature]* Date: 2/10/2020 Time: *[Time]*
 Received by: *[Signature]* Date: 2-10-20 Time: 1310

Relinquished by: _____ Date: _____ Time: _____
 Received by: _____ Date: _____ Time: _____

LAB USE ONLY

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

Sample Temperature: #113
 0.22

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ANALYSIS REQUEST
 (Circle or Specify Method No.)

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: Concho Site Manager: Mike Carmona

Project Name: King Tut #001H

Project Location: Lea County, New Mexico Project #:

Invoice to: Ike Tavaraz

Receiving Laboratory: Cardinal Lab Sampler Signature: Devin Dominguez

Comments:

LAB USE ONLY

LAB # H000383

SAMPLE IDENTIFICATION

YEAR: 2020	SAMPLING		MATRIX		PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	
	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE			None
	2/10/2020		X				X		1	N
	2/10/2020		X				X		1	N

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
<i>[Signature]</i>	2/10/20		<i>[Signature]</i>	2/10/20	1310
Relinquished by:	Date:	Time:	Received by:	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 checked="" 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"/>	
<input type="checkbox"/>	TPH 8015R	<input type="checkbox"/>	
<input type="checkbox"/>	Hold	<input type="checkbox"/>	

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

#113

0.22

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #: