

Incident ID	NAPP2115527946
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: Kelsy Waggaman Title: Environmental Coordinator
Signature:  Date: 8-26-21
email: kelsy.waggaman@conocophillips.com Telephone: 505-577-9071

OCD Only

Received by: Chad Hensley Date: 09/29/2021

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

Closure Approved by:  Date: 09/29/2021
Printed Name: Chad Hensley Title: Environmental Specialist Advanced



August 30, 2021

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

**Re: Release Characterization, Remediation, and Closure Report
ConocoPhillips (Heritage Concho)
King Tut Federal CTB Release
Unit Letter D, Section 30, Township 24 South, Range 32 East
Lea County, New Mexico
Incident ID: NAPP2115527946**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred at the King Tut Federal CTB (associated API# 30-025-41542). The release footprint is located in Public Land Survey System (PLSS) Unit Letter D, Section 30, Township 24 South, Range 32 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.194833°, -103.718290°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), the release was discovered on June 2, 2021. As documented on the C-141 form, the cause of release is stated to be from internal corrosion of a flowline causing oil and water to reportedly leak into a pasture. This resulted in the release of 4 barrels (bbls) of produced water and 2.7 barrels (bbls) of crude oil.

The release was reported to have occurred within a pasture, but during an initial site investigation it was discovered to have been a release within the confines of a battery facility pad surrounded by oilfield infrastructure and adjacent developed pad areas. The approximate release extent is shown in Figure 3. A vacuum truck was dispatched to remove any freestanding fluids, however there was no fluid recovery reported after the release. The C-141 report form for the release was submitted to the New Mexico Oil Conservation Division (NMOCD) on June 4, 2021. The NMOCD marked the incident received on 5 June 6, 2021 and assigned this release Incident ID NAPP2115527946.

SITE CHARACTERIZATION

A site characterization was performed and no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). The Site is in an area of low karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells within a ½ mile (800-meter) radius of the Site. The closest well was located 2.63 miles of the Site with a depth to groundwater at 406.45 feet below ground surface (bgs). Thus, COP chose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. The site characterization data is included in Appendix B.

Tetra Tech

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

Tel 432.682.4559

Fax 432.682.3946

www.tetrattech.com

REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Based on the site characterization, available data, and in accordance with Table I of 19.15.29.12 NMAC, the remediation RRALs for the Site are as follows:

Constituent	Remediation RRAL
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

Additionally, in accordance with the NMOCD guidance *Procedures for Implementation of the Spill Rule* (19.15.29 NMAC) (September 6, 2019), the following reclamation requirements for surface soils (0-4 feet bgs) outside of active oil and gas operations are as follows:

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg

INITIAL RESPONSE AND SITE ASSESSMENT

The approximate release extent is shown in Figure 3. As mentioned above, the release area footprint was fenced as a portion of initial response. According to the C-141, a vacuum truck was dispatched to remove all freestanding fluids. In accordance with 19.15.29.8.B.(4) NMAC, which states “the responsible party may commence remediation immediately after discovery of a release”, COP elected to begin remediation of the impacted area in June 2021.

In order to properly characterize the release footprint and achieve horizontal and vertical delineation of the release extent, Tetra Tech personnel conducted soil sampling following initial response activities. A total of six (6) borings were installed within and outside the release footprint using a hand auger on June 24, 2021. A total of two (2) borings (AH-1 & AH-2) were installed inside the release area footprint to achieve vertical delineation. A total of four (4) borings (H-N, H-E, H-S, & H-W) were installed along the perimeter of the release extent to achieve horizontal delineation. Soil samples were collected were field screened for salinity parts per million (ppm) using an ExStik II EC 400 meter.

A total of fourteen (14) samples were collected from the six (6) sampling locations and submitted to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico to be analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C.

SUMMARY OF SAMPLING RESULTS

Results from the June 2021 soil sampling event are summarized in Table 1. The analytical results associated with the interior sampling locations AH-1 & AH-2 exceeded the Site reclamation requirement for chloride (600 mg/kg) in the 0'-1' sample interval, as well as the 1'-1.5' sample at AH-2. The interior sampling locations AH-1 & AH-2 exceeded the Site reclamation requirement for TPH (100 mg/kg) in both 1'-1.5' sample intervals, as well as the 2'-2.5' sample interval at AH-1. There were no other analytical results which exceeded the Site reclamation requirements or remediation RRALs for TPH, chlorides, or BTEX in the interior sampling locations. The analytical results associated with the samples collected from the perimeter locations (H-N, H-E, H-S, & H-W) were below both the Site reclamation requirements and remediation

RRALs for all analyzed constituents. After review of the analytical results from the sampling event, both horizontal and vertical delineation was achieved during the June 2021 soil assessment activities.

REMEDIATION ACTIVITIES

Based on the analytical results and the initial C-141, COP elected to remove the remaining impacted material within the remainder of the release footprint as shown in Figure 4. In August 2021, visually impacted soils were initially excavated based on the reported release footprint and the assessment data. Initial excavation in the footprint continued down to a maximum depth of 3 feet bgs, until a representative sample from the walls and bottom of the excavation had a field screening value inferred as lower than the remediation and reclamation requirements for the site.

Site access was limited due to the presence of multiple buried, pressurized flow lines running throughout the release extent. The majority of the remediation activities were conducted by hand as a result. Soils in the vicinity of sample locations AH-1 were initially excavated to 3 feet bgs, based on the assessment data. Soils in the remainder of the footprint (in the vicinity of sample location AH-2) were excavated to 2 feet bgs. The area north of AH-1 (near the release point) required additional excavation to collect a representative sample that was below the respective RRAL. Additional excavation was conducted at that location down to 4' bgs until field screening results indicated closure criteria were attained. Excavated areas, depths and confirmation sample locations are shown in Figure 4.

Impacted soils were excavated using both mechanized equipment (mini-excavator) and hand tools (shovels) until a representative sample from the walls and bottom of the excavation were below the RRALs. Approximately 92 cubic yards of excavated material were transported to the R360 Environmental Solutions Halfway facility in Hobbs, New Mexico. Photographs from the excavated areas prior to backfill are provided in Appendix D. Once confirmation sampling activities were completed and associated analytical results were below the RRALs, the excavated areas were backfilled with clean material to surface grade. Copies of the waste manifests are included in Appendix E.

CONFIRMATION SAMPLING RESULTS

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips conducted confirmation sampling of the remediated area for verification of remedial activities where each sidewall and floor sample was representative of approximately 200 square feet. A total of four (4) floor samples and ten (10) sidewall samples were collected during the remedial activities in August 2021. Confirmation sampling locations are indicated in Figure 4.

Confirmation samples were placed into laboratory-provided sample containers, transferred under chain-of-custody, and analyzed for TPH, BTEX, and chloride within appropriate holding times by Eurofins-Xenco Laboratories (Xenco) in Midland, Texas.

The final excavation area encompassed a surface area of approximately 750 square feet. Each confirmation sample laboratory analytical result was directly compared to the proposed RRALs to demonstrate compliance. All final confirmation soil samples (floor and sidewall) were below the respective RRALs for BTEX, TPH and chlorides. Results from the August 2021 confirmation sampling event are summarized in Table 2.

Release Characterization, Remediation, and Closure Report
August 30, 2021

ConocoPhillips

CONCLUSION

ConocoPhillips has completed remediation at the release site. This final closure report has been submitted within 90 days of discovery of the release. This final closure report details the release characterization and remediation activities and the results of the confirmation sampling.

If you have any questions concerning the soil assessment, the remediation work, or confirmation sampling for the Site, please call me at (512) 338-2861.

Sincerely,
Tetra Tech, Inc.

A handwritten signature in blue ink, appearing to read 'CLL', is positioned above the printed name of the signatory.

Christian M. Llull, P.G.
Project Manager

cc:
Ms. Kelsy Waggaman, GPBU – ConocoPhillips
Mr. Luke Alejandro, GPBU – ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent and Assessment
- Figure 4 – Remediation Extents and Confirmation Sampling Locations

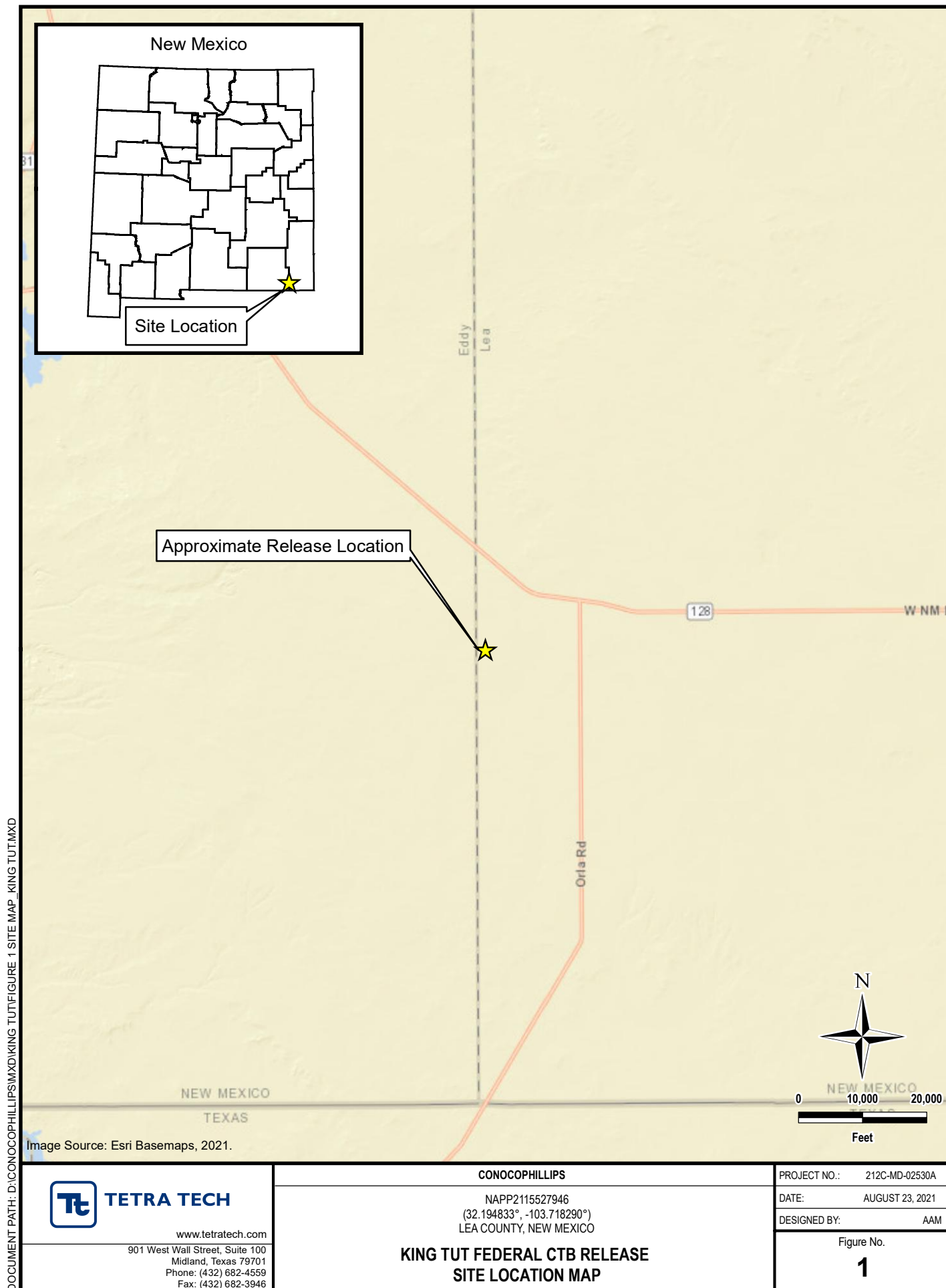
Tables:

- Table 1 – Summary of Analytical Results – Initial Soil Assessment
- Table 2 – Summary of Analytical Results – Confirmation Sampling

Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Laboratory Analytical Data
- Appendix D – Photographic Documentation
- Appendix E – Waste Manifests

FIGURES



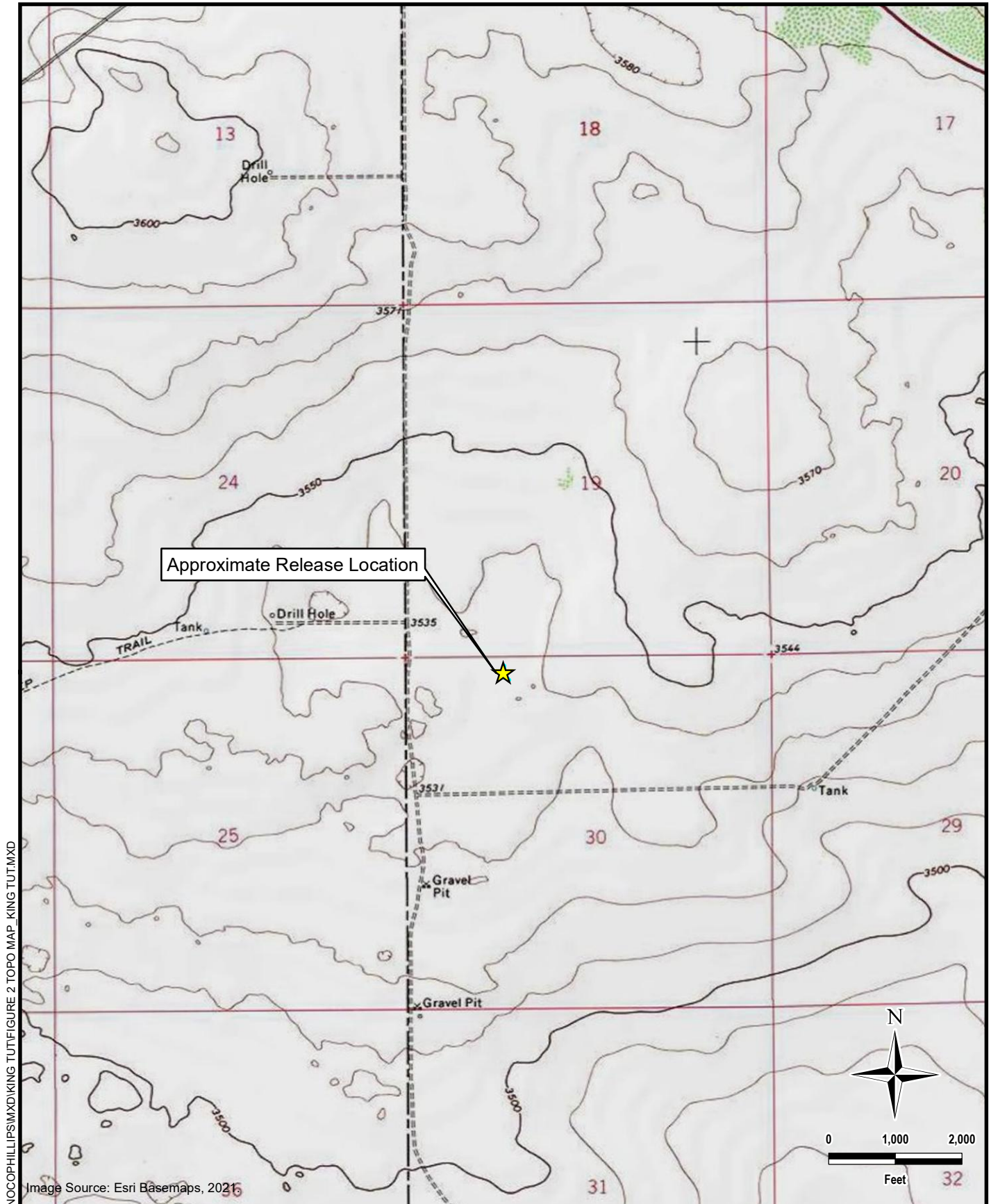


Image Source: Esri Basemaps, 2021

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\KING TUT\FIGURE 2 TOPO MAP_KING TUT.MXD



TETRA TECH

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CONOCOPHILLIPS

NAPP2115527946
(32.194833°, -103.718290°)
LEA COUNTY, NEW MEXICO

**KING TUT FEDERAL CTB RELEASE
TOPOGRAPHIC MAP**

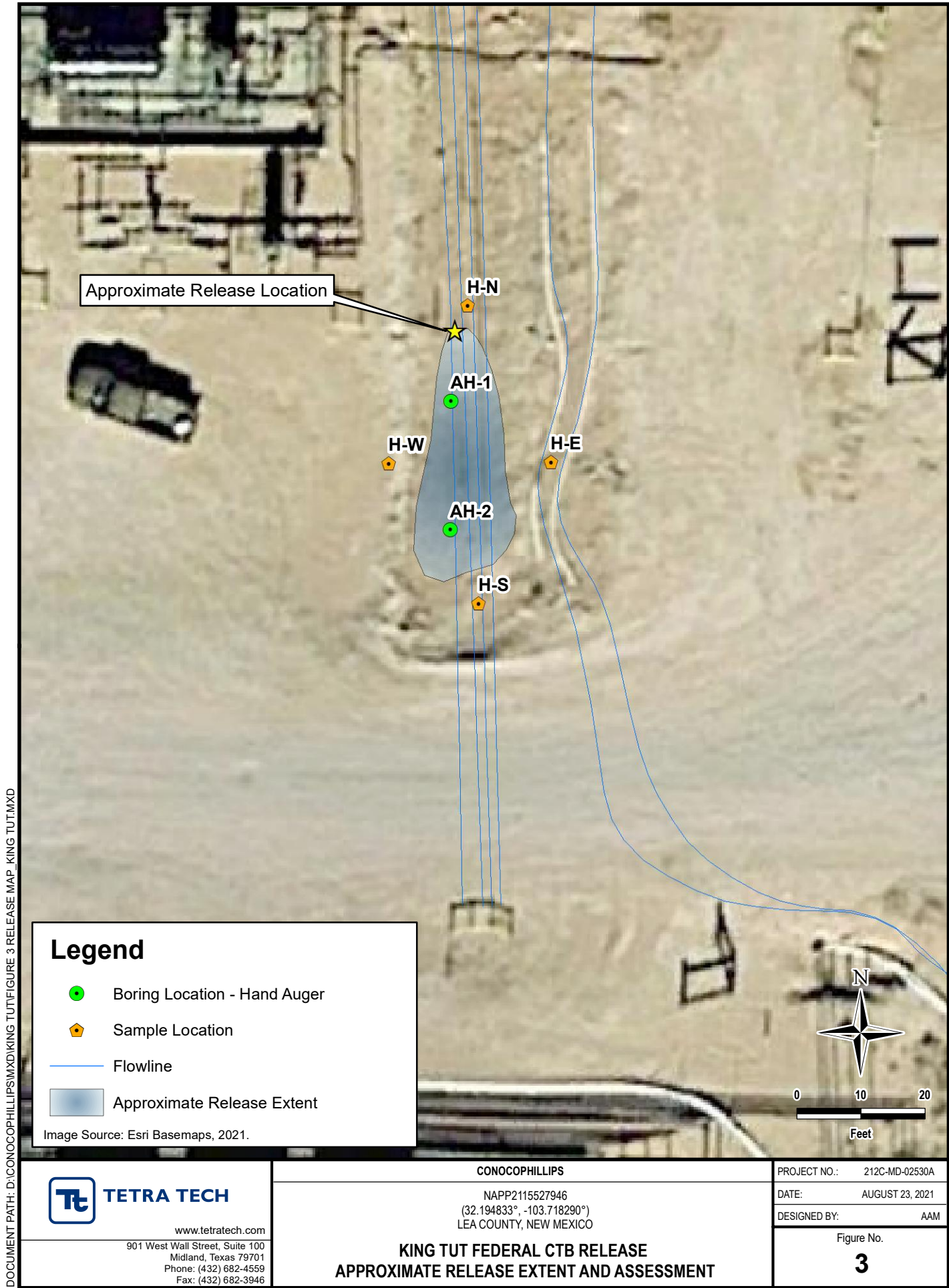
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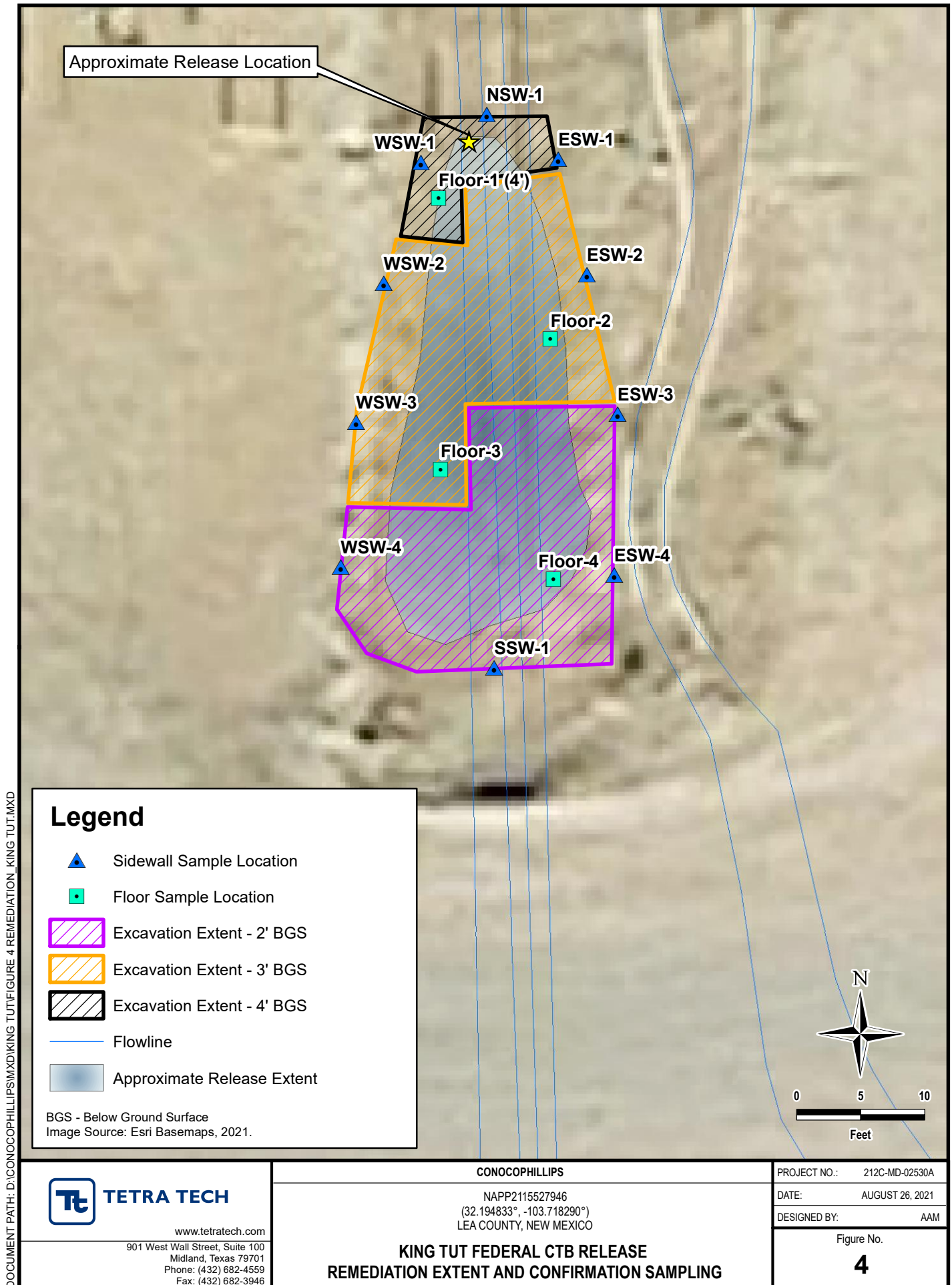
DATE: AUGUST 23, 2021

DESIGNED BY: AAM

Figure No.

2





TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
INITIAL SOIL ASSESSMENT - NAPP2115527946
HERITAGE CONCHO
KING TUT FEDERAL CTB RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹		BTEX ²										TPH ³						
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)
					mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	C ₆ - C ₁₀	Q	>C ₁₀ - C ₂₈	Q	>C ₂₈ - C ₃₆	Q	
AH-1	6/24/2021	ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
		0-1	3,360		< 0.050		< 0.050		< 0.050		2.25	GC-NC1	2.25	GC-NC1	496		7,250		1,280		9,026
		1-1.5	256		< 0.050		< 0.050		< 0.050		0.609	GC-NC1	0.609	GC-NC1	69.0		4,380		1,030		5,479
		2-2.5	544		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		202		69.1		271
		3-3.5	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		27.5		< 10.0		27.5
AH-2	6/24/2021	4-4.5	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		17.3		< 10.0		17.3
		0-1	8,530		< 0.050		< 0.050		< 0.050		0.499	GC-NC1	0.499	GC-NC1	39.3		4,000		960		4,999
		1-1.5	5,120		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		229		69.8		299
		2-2.5	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		3-3.5	160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
H-N	6/24/2021	4-4.5	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		0-1	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		0-1	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		0-1	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
H-W	6/24/2021	0-1	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-

NOTES:

ft. Feet
bgs Below ground surface
mg/kg Milligrams per kilogram
NA Sample not analyzed for constituent
TPH Total Petroleum Hydrocarbons
GRO Gasoline range organics
DRO Diesel range organics
1 Method SM4500Cl-B
2 Method 8021B
3 Method 8015M

Bold and italicized values indicate exceedance of proposed Remediation RRals and Reclamation Requirements.

Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

GC-NC1 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
CONFIRMATION SAMPLING - NAPP2115527946
HERITAGE CONCHO
KING TUT FEDERAL CTB RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results	Chloride ¹		BTEX ²												TPH ³							
			Chlorides			Benzene		Toluene		Ethylbenzene		m,p-Xylene		o-Xylene		Total Xylenes		Total BTEX		GRO		DRO		ORO	
			ft. bgs	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
FLOOR-1 (3')	8/18/2021	3	2,170	147		< 0.00200	U F2 F1	< 0.00200	U F2 F1	< 0.00200	U F1	< 0.00399	U F1	< 0.00200	U F1	< 0.00399	U F2 F1	< 50.0	U	126		< 50.0	U	126	
FLOOR-1 (4)**	8/23/2021	4	242	81.3		< 0.00201	U	< 0.00201	U	< 0.00201	U	< 0.00402	U	< 0.00201	U	< 0.00402	U	< 50.0	U	< 50.0	U	< 50.0	U	< 50.0	U
FLOOR-2 (3')	8/18/2021	3	230	47.5		< 0.00199	U	< 0.00199	U	< 0.00199	U	< 0.00398	U	< 0.00199	U	< 0.00398	U	< 50.0	U	< 50.0	U	< 50.0	U	< 50.0	U
FLOOR-3 (3')	8/18/2021	3	450	213		< 0.00198	U	< 0.00198	U	< 0.00198	U	< 0.00397	U	< 0.00198	U	< 0.00397	U	< 49.9	U	< 49.9	U	< 49.9	U	< 49.9	U
FLOOR-4 (2')	8/18/2021	2	120	26.2		< 0.00199	U	< 0.00199	U	< 0.00199	U	< 0.00398	U	< 0.00199	U	< 0.00398	U	< 49.9	U	< 49.9	U	< 49.9	U	< 49.9	U
NSW-1	8/17/2021	-	131	27.0	F1	< 0.00200	U	< 0.00200	U	< 0.00200	U	< 0.00401	U	< 0.00200	U	< 0.00401	U	< 50.0	U	< 50.0	U	< 50.0	U	< 50.0	U
ESW-1	8/17/2021	-	41.9	23.3		< 0.00200	U	< 0.00200	U	< 0.00200	U	< 0.00399	U	< 0.00200	U	< 0.00399	U	< 49.9	U	< 49.9	U	< 49.9	U	< 49.9	U
ESW-2	8/17/2021	-	64.9	26.3		< 0.00199	U	< 0.00199	U	< 0.00199	U	< 0.00398	U	< 0.00199	U	< 0.00398	U	< 49.8	U	< 49.8	U	< 49.8	U	< 49.8	U
ESW-3	8/17/2021	-	84.5	25.2		< 0.00200	U	< 0.00200	U	< 0.00200	U	< 0.00399	U	< 0.00200	U	< 0.00399	U	< 49.9	U	< 49.9	U	< 49.9	U	< 49.9	U
ESW-4	8/17/2021	-	13.4	71.1		< 0.00199	U	< 0.00199	U	< 0.00199	U	< 0.00398	U	< 0.00199	U	< 0.00398	U	< 49.8	U	< 49.8	U	< 49.8	U	< 49.8	U
SSW-1	8/17/2021	-	110	26.4		< 0.00198	U	< 0.00198	U	< 0.00198	U	< 0.00396	U	< 0.00198	U	< 0.00396	U	< 49.9	U	< 49.9	U	< 49.9	U	< 49.9	U
WSW-1	8/17/2021	-	206	68.3		< 0.00199	U	< 0.00199	U	< 0.00199	U	< 0.00398	U	< 0.00199	U	< 0.00398	U	< 49.8	U	< 49.8	U	< 49.8	U	< 49.8	U
WSW-2	8/17/2021	-	124	62.4		< 0.00199	U	< 0.00199	U	< 0.00199	U	< 0.00398	U	< 0.00199	U	< 0.00398	U	< 49.9	U	< 49.9	U	< 49.9	U	< 49.9	U
WSW-3	8/17/2021	-	358	120		< 0.00200	U	< 0.00200	U	< 0.00200	U	< 0.00400	U	< 0.00200	U	< 0.00400	U	< 50.0	U	< 50.0	U	< 50.0	U	< 50.0	U
WSW-4	8/17/2021	-	358	87.7		< 0.00200	U	< 0.00200	U	< 0.00200	U	< 0.00399	U	< 0.00200	U	< 0.00399	U	< 50.0	U	< 50.0	U	< 50.0	U	< 50.0	U

NOTES:

ft. Feet
bgs Below ground surface
ppm Parts per million
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbons
GRO Gasoline range organics
DRO Diesel range organics
ORO Oil range organics
1 EPA Method 300.0
2 EPA Method 8021B
3 EPA Method 8015B NM

Bold and italicized values indicate exceedance of proposed Remediation RRALs and Reclamation Requirements.

Gold highlight represents soil horizons that were removed during deepening of excavation floors.

Green highlight represents soil intervals that were removed during horizontal expansion of excavation sidewalls.

* These iterative samples are located to encompass the original sample location that triggered removal, with further excavation in each area indicated in (i).

QUALIFIERS:

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

APPENDIX A C-141 Forms

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	NAPP2115527946
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		

Incident ID	NAPP2115527946
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></u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>6/6/2021</u>

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<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.

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Kyleigh Jayyann Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: Kelley Jayaram Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature:  Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

NAPP2115527946

L48 Spill Volume Estimate Form

Facility Name & Number:		hConcho - King Tut CTB							
Asset Area:		Lea County - Near Carlsbad							
Release Discovery Date & Time:		7am, 6/2/21 - Last known time there was no release observed: 4am 6/2/21							
Release Type:		Oil Mixture							
Provide any known details about the event:		Subsurface flowline release. No standing fluid to pick up, Lat 32.1947, Lon -103.7183							
Spill Calculation - Subsurface Spill - Rectangle									
Was the release on pad or off-pad?		See reference table below							
Has it rained at least a half inch in the last 24 hours?		See reference table below							
Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Depth (in.)	Soil Spilled-Fluid Saturation	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	10.0	25.0	12.00	15.12%	44.500	6.728	40.00%	2.691	4.037
Rectangle B					0.000	0.000		0.000	0.000
Rectangle C					0.000	0.000		0.000	0.000
Rectangle D					0.000	0.000		0.000	0.000
Rectangle E					0.000	0.000		0.000	0.000
Rectangle F					0.000	0.000		0.000	0.000
Rectangle G					0.000	0.000		0.000	0.000
Rectangle H					0.000	0.000		0.000	0.000
Rectangle I					0.000	0.000		0.000	0.000
Rectangle J					0.000	0.000		0.000	0.000
Total Volume Release:						6.728		2.691	4.037

APPENDIX B

Site Characterization Data



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 620812.917

Northing (Y): 3562751.252

Radius: 800

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


8/27/21 12:25 PM

Page 1 of 1


WATER COLUMN/ AVERAGE
DEPTH TO WATER


Low Karst
Concho King Tut 6.2.2021 Release

Legend

 High

 King Tut 6.2.2021

 Low

 Medium

 King Tut 6.2.2021



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National Water Information System: Web Interface

USGS Water Resources

Data Category: GroundwaterGeographic Area: New MexicoGO

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- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 320952103444401

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 320952103444401 25S.31E.02.214411

Eddy County, New Mexico
Latitude 32°09'50.0", Longitude 103°44'41.2" NAD83
Land-surface elevation 3,468.0 feet above NGVD29
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Azotea Tongue of Seven Rivers Formation (313AZOT) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Wat leve app stat
1992-11-05	08:50 UTC	m	62610		3060.56	NGVD29	1	S			
1992-11-05	08:50 UTC	m	62611		3062.27	NAVD88	1	S			
1992-11-05	08:50 UTC	m	72019	407.44			1	S			
1998-01-29		D	62610		3061.55	NGVD29	1	S			
1998-01-29		D	62611		3063.26	NAVD88	1	S			
1998-01-29		D	72019	406.45			1	S			

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.




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National Water Information System: Web Interface


[USGS Water Resources](#)

Data Category:
Groundwater

Geographic Area:
New Mexico

GO

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- Explore the *New* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- 1 sites found

Agency code = usgs

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

Lea County, New Mexico

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 Other aquifers (N9999OTHER) national aquifer.

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

Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Wat leve app stat
1959-02-18			D 62610		3185.60	NGVD29	1	Z			
1959-02-18			D 62611		3187.32	NAVD88	1	Z			
1959-02-18			D 72019	313.40			1	Z			
1981-06-12			D 62610		3194.60	NGVD29	1	Z			
1981-06-12			D 62611		3196.32	NAVD88	1	Z			
1981-06-12			D 72019	304.40			1	Z			
1986-03-11			D 62610		3193.79	NGVD29	1	Z			
1986-03-11			D 62611		3195.51	NAVD88	1	Z			
1986-03-11			D 72019	305.21			1	Z			
1991-05-29			D 62610		3211.55	NGVD29	1	Z			
1991-05-29			D 62611		3213.27	NAVD88	1	Z			
1991-05-29			D 72019	287.45			1	Z			
1996-03-14			D 62610		3213.60	NGVD29	1	S			
1996-03-14			D 62611		3215.32	NAVD88	1	S			
1996-03-14			D 72019	285.40			1	S			
2001-02-27			D 62610		3210.32	NGVD29	1	S			
2001-02-27			D 62611		3212.04	NAVD88	1	S			
2001-02-27			D 72019	288.68			1	S			
2013-01-17	16:30 UTC		m 62610		3209.31	NGVD29	1	S	USGS		S
2013-01-17	16:30 UTC		m 62611		3211.03	NAVD88	1	S	USGS		S
2013-01-17	16:30 UTC		m 72019	289.69			1	S	USGS		S

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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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: 2021-06-16 02:59:02 EDT

0.3 0.26 nadww02



New Mexico Office of the State Engineer

Point of Diversion Summary

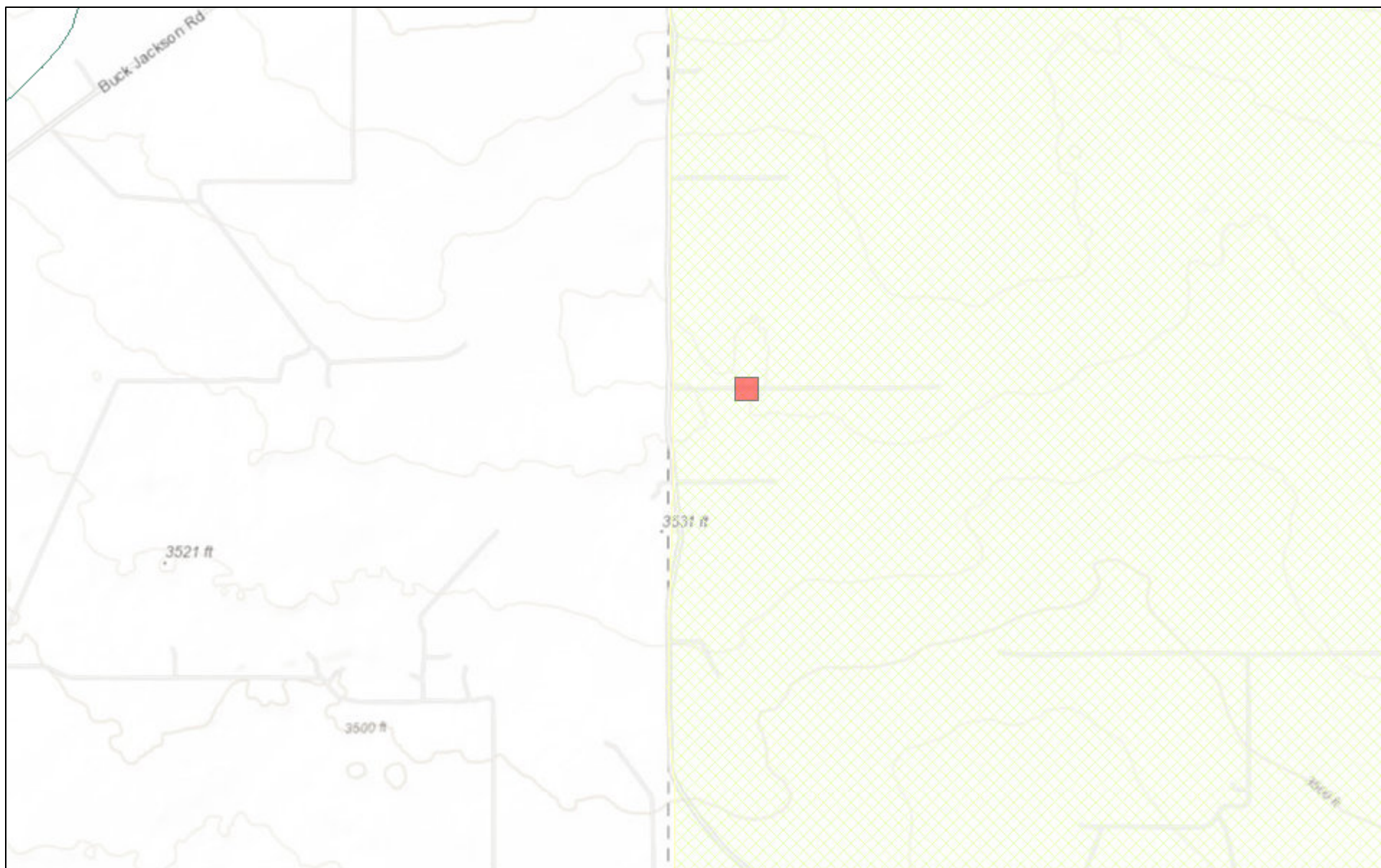
		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)				(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y		
NA	C 03555 POD1	2	2	1	05	24S	32E	622748	3569233		
Driller License: 1654		Driller Company:				NOT WORKING FOR HIRE--SIRMAN DRILLING AND CONSTRUC					
Driller Name:											
Drill Start Date:	10/20/2013	Drill Finish Date:				10/21/2013		Plug Date:			
Log File Date:	11/07/2013	PCW Rcv Date:						Source:		Shallow	
Pump Type:		Pipe Discharge Size:						Estimated Yield:		5 GPM	
Casing Size:	6.00	Depth Well:				600 feet		Depth Water:		380 feet	
Water Bearing Stratifications:		Top		Bottom		Description					
		475		550		Sandstone/Gravel/Conglomerate					
Casing Perforations:		Top		Bottom							
		460		520							

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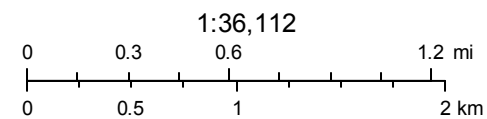
6/16/21 12:49 AM

POINT OF DIVERSION SUMMARY


New Mexico NFHL Data




June 16, 2021



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



science for a changing world

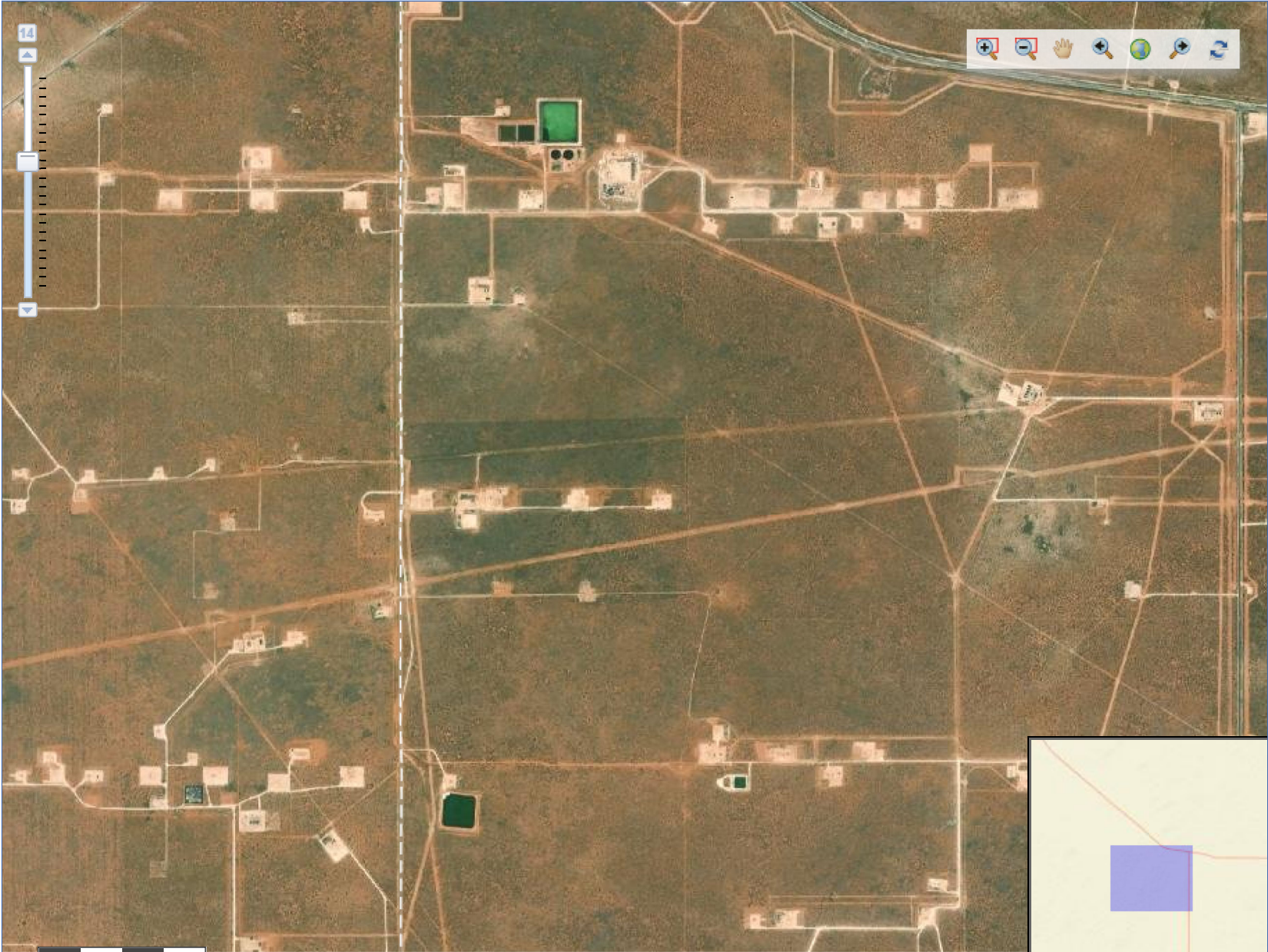



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Water Well Data
Average Depth to Groundwater (ft)
hConcho King Tut 6.2.2021 Release
Lea County, New Mexico

23 South			31 East		
6	5	4	3	2	1
85	354	168			
140			10	11	12
18	17	16	15	14	13
	125				
19	20	21	22	23	24
30	29	28	27	26	25
	140			430	
31	32	33	34	35	36

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

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

24 South			31 East		
6	5	4	3	2	1
				205	
				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
		474			

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

24 South			33 East		
6	5	4	3	2	1
7	8	9	10	20	11
			22		
18	17	16	15	14	13
19	20	21	22	23	24
				208	16.9
30	29	28	27	26	25
31	32	33	70	34	35
		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	390	22	23
		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	172	2
	118				1
7	8	9	10	11	12
				140	200
18	17	16	15	14	13
					185
19	20	21	22	23	24
	200	120			
30	29	28	27	26	25
			125	110	
31	32	33	34	35	36
190					

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

APPENDIX C

Laboratory Analytical Data



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

July 06, 2021

BRITTANY LONG

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: KING TUT RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 06/30/21 13:47.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/30/2021	Sampling Date:	06/24/2021
Reported:	07/06/2021	Sampling Type:	Soil
Project Name:	KING TUT RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02530	Sample Received By:	Tamara Oldaker
Project Location:	COG - LEA CO NM		

Sample ID: H - N (0-1') (H211699-01)

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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTEX	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

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	07/01/2021	ND	432	108	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	07/06/2021	ND	206	103	200	9.50	
DRO >C10-C28*	<10.0	10.0	07/06/2021	ND	222	111	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	07/06/2021	ND					

Surrogate: 1-Chlorooctane 86.4 % 44.3-133

Surrogate: 1-Chlorooctadecane 93.0 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 06/30/2021
Reported: 07/06/2021
Project Name: KING TUT RELEASE
Project Number: 212C - MD - 02530
Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: H - S (0-1') (H211699-02)

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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTEx	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

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	07/01/2021	ND	432	108	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	07/06/2021	ND	206	103	200	9.50	
DRO >C10-C28*	<10.0	10.0	07/06/2021	ND	222	111	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	07/06/2021	ND					

Surrogate: 1-Chlorooctane 81.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 85.7 % 38.9-142

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Analytical Results For:

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

Received: 06/30/2021
Reported: 07/06/2021
Project Name: KING TUT RELEASE
Project Number: 212C - MD - 02530
Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: H - E (0-1') (H211699-03)

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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTEx	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

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	07/01/2021	ND	432	108	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	07/06/2021	ND	206	103	200	9.50	
DRO >C10-C28*	<10.0	10.0	07/06/2021	ND	222	111	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	07/06/2021	ND					

Surrogate: 1-Chlorooctane 88.3 % 44.3-133

Surrogate: 1-Chlorooctadecane 96.8 % 38.9-142

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Analytical Results For:

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

Received: 06/30/2021
Reported: 07/06/2021
Project Name: KING TUT RELEASE
Project Number: 212C - MD - 02530
Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: H - W (0-1') (H211699-04)

BTX 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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTX	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

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	07/01/2021	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	07/06/2021	ND	206	103	200	9.50	
DRO >C10-C28*	<10.0	10.0	07/06/2021	ND	222	111	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	07/06/2021	ND					

Surrogate: 1-Chlorooctane 77.5 % 44.3-133

Surrogate: 1-Chlorooctadecane 81.0 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 06/30/2021
 Reported: 07/06/2021
 Project Name: KING TUT RELEASE
 Project Number: 212C - MD - 02530
 Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 1 (0-1') (H211699-05)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	2.25	0.150	07/01/2021	ND	6.22	104	6.00	3.07	GC-NC1
Total BTX	2.25	0.300	07/01/2021	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 285 % 69.9-140

Chloride, SM4500CI-B			mg/kg					Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3360	16.0	07/01/2021	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	496	10.0	07/06/2021	ND	206	103	200	9.50	
DRO >C10-C28*	7250	10.0	07/06/2021	ND	222	111	200	13.7	
EXT DRO >C28-C36	1280	10.0	07/06/2021	ND					

Surrogate: 1-Chlorooctane 201 % 44.3-133

Surrogate: 1-Chlorooctadecane 394 % 38.9-142

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Analytical Results For:

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

Received: 06/30/2021
Reported: 07/06/2021
Project Name: KING TUT RELEASE
Project Number: 212C - MD - 02530
Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: AH - 1 (1'-1.5') (H211699-06)

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	0.609	0.150	07/01/2021	ND	6.22	104	6.00	3.07	GC-NC1
Total BTEX	0.609	0.300	07/01/2021	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 162 % 69.9-140

Chloride, SM4500CI-B			mg/kg					Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	07/01/2021	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	69.0	10.0	07/02/2021	ND	236	118	200	3.96	
DRO >C10-C28*	4380	10.0	07/02/2021	ND	249	125	200	1.46	QM-07
EXT DRO >C28-C36	1030	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 135 % 44.3-133

Surrogate: 1-Chlorooctadecane 223 % 38.9-142

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Analytical Results For:

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

Received: 06/30/2021
Reported: 07/06/2021
Project Name: KING TUT RELEASE
Project Number: 212C - MD - 02530
Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: AH - 1 (2'-2.5') (H211699-07)

BTX 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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTX	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	544	16.0	07/01/2021	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	07/02/2021	ND	236	118	200	3.96	
DRO >C10-C28*	202	10.0	07/02/2021	ND	249	125	200	1.46	
EXT DRO >C28-C36	69.1	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 107 % 44.3-133

Surrogate: 1-Chlorooctadecane 124 % 38.9-142

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Analytical Results For:

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

Received: 06/30/2021
Reported: 07/06/2021
Project Name: KING TUT RELEASE
Project Number: 212C - MD - 02530
Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: AH - 1 (3'-3.5') (H211699-08)

BTX 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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTX	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

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	07/01/2021	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	07/02/2021	ND	236	118	200	3.96	
DRO >C10-C28*	27.5	10.0	07/02/2021	ND	249	125	200	1.46	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 120 % 44.3-133

Surrogate: 1-Chlorooctadecane 124 % 38.9-142

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Analytical Results For:

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

Received: 06/30/2021
 Reported: 07/06/2021
 Project Name: KING TUT RELEASE
 Project Number: 212C - MD - 02530
 Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 1 (4'-4.5') (H211699-09)

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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTEX	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.9-140

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	07/01/2021	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	07/02/2021	ND	236	118	200	3.96	
DRO >C10-C28*	17.3	10.0	07/02/2021	ND	249	125	200	1.46	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 112 % 44.3-133

Surrogate: 1-Chlorooctadecane 115 % 38.9-142

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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
BRITTANY LONG
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received: 06/30/2021
Reported: 07/06/2021
Project Name: KING TUT RELEASE
Project Number: 212C - MD - 02530
Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: AH - 2 (0-1') (H211699-10)

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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	0.499	0.150	07/01/2021	ND	6.22	104	6.00	3.07	GC-NC1
Total BTEx	0.499	0.300	07/01/2021	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 140 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8530	16.0	07/01/2021	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	39.3	10.0	07/02/2021	ND	236	118	200	3.96	
DRO >C10-C28*	4000	10.0	07/02/2021	ND	249	125	200	1.46	
EXT DRO >C28-C36	960	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 134 % 44.3-133

Surrogate: 1-Chlorooctadecane 223 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 06/30/2021
Reported: 07/06/2021
Project Name: KING TUT RELEASE
Project Number: 212C - MD - 02530
Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: AH - 2 (1'-1.5') (H211699-11)

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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTEX	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5120	16.0	07/01/2021	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	07/02/2021	ND	236	118	200	3.96	
DRO >C10-C28*	229	10.0	07/02/2021	ND	249	125	200	1.46	
EXT DRO >C28-C36	69.8	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 115 % 44.3-133

Surrogate: 1-Chlorooctadecane 127 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 06/30/2021
 Reported: 07/06/2021
 Project Name: KING TUT RELEASE
 Project Number: 212C - MD - 02530
 Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 2 (2'-2.5') (H211699-12)

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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTEx	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

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	07/01/2021	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	07/02/2021	ND	236	118	200	3.96	
DRO >C10-C28*	<10.0	10.0	07/02/2021	ND	249	125	200	1.46	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 112 % 44.3-133

Surrogate: 1-Chlorooctadecane 116 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 06/30/2021
Reported: 07/06/2021
Project Name: KING TUT RELEASE
Project Number: 212C - MD - 02530
Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: AH - 2 (3'-3.5') (H211699-13)

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	07/01/2021	ND	2.02	101	2.00	0.299	
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58	
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46	
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07	
Total BTEx	<0.300	0.300	07/01/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.9-140

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	07/01/2021	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	07/02/2021	ND	236	118	200	3.96	
DRO >C10-C28*	<10.0	10.0	07/02/2021	ND	249	125	200	1.46	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 110 % 44.3-133

Surrogate: 1-Chlorooctadecane 113 % 38.9-142

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 06/30/2021
 Reported: 07/06/2021
 Project Name: KING TUT RELEASE
 Project Number: 212C - MD - 02530
 Project Location: COG - LEA CO NM

Sampling Date: 06/24/2021
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: AH - 2 (4'-4.5') (H211699-14)

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	07/01/2021	ND	2.02	101	2.00	0.299		
Toluene*	<0.050	0.050	07/01/2021	ND	2.12	106	2.00	2.58		
Ethylbenzene*	<0.050	0.050	07/01/2021	ND	2.09	104	2.00	3.46		
Total Xylenes*	<0.150	0.150	07/01/2021	ND	6.22	104	6.00	3.07		
Total BTEx	<0.300	0.300	07/01/2021	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.9-140

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	07/01/2021	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	07/02/2021	ND	236	118	200	3.96	
DRO >C10-C28*	<10.0	10.0	07/02/2021	ND	249	125	200	1.46	
EXT DRO >C28-C36	<10.0	10.0	07/02/2021	ND					

Surrogate: 1-Chlorooctane 107 % 44.3-133

Surrogate: 1-Chlorooctadecane 110 % 38.9-142

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Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

Page 1 of

Page 17 of 18

Client Name: COG		Site Manager: Brittany Lang	
Project Name: King Tut Release		Project #: 2124-MD-02530	
Project Location: Leo County, NM		Invoice to: ConocoPhillips, Attention: Kelsie Wagsman	
Receiving Laboratory: Cardinal Laboratories		Sampler Signature: Cathy Birendra	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃		
1	H-N (0-1')	6/24/21		X				X	N
2	H-S (0-1')	6/24/21		X				X	N
3	H-E (0-1')	6/24/21		X				X	N
4	H-W (0-1')	6/24/21		X				X	N
5	AH-1 (0-1')	6/24/21		X				X	N
6	AH-1 (1'-1.5')	6/24/21		X				X	N
7	AH-1 (2'-2.5')	6/24/21		X				X	N
8	AH-1 (3'-3.5')	6/24/21		X				X	N
9	AH-1 (4'-4.5')	6/24/21		X				X	N
10	AH-2 (0-1')	6/24/21		X				X	N

LAB USE ONLY		REMARKS:
LAB USE ONLY	LAB USE ONLY	
BTX 8021B	BTX 8260B	ANALYSIS REQUEST (Circle or Specify Method No.) TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO) 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 Asbestos Hold
TPH 8015M (GRO - DRO - ORO)	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	
Asbestos	Hold	
BTX 8021B	BTX 8260B	
TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	
PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	

Relinquished by: Colton Birendra	Date: 6/30/21	Time: 1347
Relinquished by: Brittany Lang	Date: 6/30/21	Time: 1347
Relinquished by:	Date:	Time:
Relinquished by:	Date:	Time:

Sample Temperature: 5.5°C	LAB USE ONLY
Special Report Limits or TRRP Report	REMARKS:
<input type="checkbox"/> Rush: Same Day 24 hr 48 hr 72 hr	
<input type="checkbox"/> Rush Charges Authorized	
<input type="checkbox"/> Special Report Limits or TRRP Report	

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Analysis Request of Chain of Custody Record

Page 2 of 18



Tetra Tech, Inc.

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

Client Name:

COG

Site Manager:

Brittany Long

Project Name:

King Tut Release

Project Location:

Lee County, NM

Project #:

212C-MD-02530

Invoice to:

Conceal Phillips, Attention: Kellyn Wasserman

Receiving Laboratory:

Central Laboratories

Sampler Signature:

Cotton Bicknell

Comments:

LAB #

LAB USE ONLY

SAMPLE IDENTIFICATION

SAMPLING

YEAR

DATE

TIME

MATRIX

PRESERVATIVE METHOD

WATER
SOILHCL
HNO₃
ICE

CONTAINERS

FILTERED (Y/N)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO)

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

Asbestos

Hold

ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by:

Date: Time:

Received by:

Date: Time: 1/347

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

LAB USE ONLY

REMARKS:

Sample Temperature

☐ 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



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-5232-1

Laboratory Sample Delivery Group: Lea County, NM
Client Project/Site: Tetra Tech General

For:

Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Attn: Joe Tyler

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

Authorized for release by:
8/19/2021 7:57:45 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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results through

TotalAccess

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Laboratory Job ID: 880-5232-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Job ID: 880-5232-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-5232-1

Receipt

The samples were received on 8/18/2021 2:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.9°C

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: NSW-1

Lab Sample ID: 880-5232-1

Date Collected: 08/17/21 10:00

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 04:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 04:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 04:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/18/21 14:45	08/19/21 04:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 04:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/18/21 14:45	08/19/21 04:40	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/18/21 14:45	08/19/21 04:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	08/18/21 14:45	08/19/21 04:40	1
1,4-Difluorobenzene (Surr)	99		70 - 130	08/18/21 14:45	08/19/21 04:40	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 14:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 14:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 14:34	1
Total TPH	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	08/18/21 15:17	08/19/21 14:34	1
o-Terphenyl	128		70 - 130	08/18/21 15:17	08/19/21 14:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.0	F1	4.95		mg/Kg			08/19/21 11:48	1

Client Sample ID: ESW-1

Lab Sample ID: 880-5232-2

Date Collected: 08/17/21 10:20

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 05:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 05:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 05:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/18/21 14:45	08/19/21 05:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 05:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/18/21 14:45	08/19/21 05:01	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/18/21 14:45	08/19/21 05:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	08/18/21 14:45	08/19/21 05:01	1
1,4-Difluorobenzene (Surr)	107		70 - 130	08/18/21 14:45	08/19/21 05:01	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 15:37	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: ESW-1

Lab Sample ID: 880-5232-2

Date Collected: 08/17/21 10:20

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 15:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 15:37	1
Total TPH	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 15:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				08/18/21 15:17	08/19/21 15:37	1
o-Terphenyl	115		70 - 130				08/18/21 15:17	08/19/21 15:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.3		5.01		mg/Kg			08/19/21 12:05	1

Client Sample ID: ESW-2

Lab Sample ID: 880-5232-3

Date Collected: 08/17/21 10:40

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 05:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 05:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 05:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 05:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 05:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 05:21	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 05:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130				08/18/21 14:45	08/19/21 05:21	1
1,4-Difluorobenzene (Surr)	97		70 - 130				08/18/21 14:45	08/19/21 05:21	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 15:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 15:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 15:59	1
Total TPH	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 15:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				08/18/21 15:17	08/19/21 15:59	1
o-Terphenyl	99		70 - 130				08/18/21 15:17	08/19/21 15:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.3		4.98		mg/Kg			08/19/21 12:10	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: ESW-3

Lab Sample ID: 880-5232-4

Date Collected: 08/17/21 11:00

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 05:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 05:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 05:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/18/21 14:45	08/19/21 05:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 05:41	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/18/21 14:45	08/19/21 05:41	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/18/21 14:45	08/19/21 05:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	08/18/21 14:45	08/19/21 05:41	1
1,4-Difluorobenzene (Surr)	93		70 - 130	08/18/21 14:45	08/19/21 05:41	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 16:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 16:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 16:27	1
Total TPH	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	08/18/21 15:17	08/19/21 16:27	1
o-Terphenyl	91		70 - 130	08/18/21 15:17	08/19/21 16:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.2		4.96		mg/Kg			08/19/21 12:16	1

Client Sample ID: ESW-4

Lab Sample ID: 880-5232-5

Date Collected: 08/17/21 11:20

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 06:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 06:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 06:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 06:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 06:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 06:02	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 06:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130	08/18/21 14:45	08/19/21 06:02	1
1,4-Difluorobenzene (Surr)	94		70 - 130	08/18/21 14:45	08/19/21 06:02	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 16:48	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: ESW-4

Lab Sample ID: 880-5232-5

Date Collected: 08/17/21 11:20

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 16:48	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 16:48	1
Total TPH	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				08/18/21 15:17	08/19/21 16:48	1
o-Terphenyl	97		70 - 130				08/18/21 15:17	08/19/21 16:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.1		5.05		mg/Kg			08/19/21 12:22	1

Client Sample ID: SSW-1

Lab Sample ID: 880-5232-6

Date Collected: 08/17/21 12:00

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/18/21 14:45	08/19/21 06:22	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/18/21 14:45	08/19/21 06:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/18/21 14:45	08/19/21 06:22	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/18/21 14:45	08/19/21 06:22	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/18/21 14:45	08/19/21 06:22	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/18/21 14:45	08/19/21 06:22	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		08/18/21 14:45	08/19/21 06:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				08/18/21 14:45	08/19/21 06:22	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/18/21 14:45	08/19/21 06:22	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 17:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 17:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 17:09	1
Total TPH	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				08/18/21 15:17	08/19/21 17:09	1
o-Terphenyl	119		70 - 130				08/18/21 15:17	08/19/21 17:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.4		5.04		mg/Kg			08/19/21 12:38	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: WSW-1

Lab Sample ID: 880-5232-7

Date Collected: 08/17/21 13:00

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 06:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 06:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 06:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 06:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 06:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 06:43	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 06:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130	08/18/21 14:45	08/19/21 06:43	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/18/21 14:45	08/19/21 06:43	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 18:09	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 18:09	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 18:09	1
Total TPH	<49.8	U	49.8		mg/Kg		08/18/21 15:17	08/19/21 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	08/18/21 15:17	08/19/21 18:09	1
o-Terphenyl	120		70 - 130	08/18/21 15:17	08/19/21 18:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.3		4.98		mg/Kg			08/19/21 12:44	1

Client Sample ID: WSW-2

Lab Sample ID: 880-5232-8

Date Collected: 08/17/21 13:20

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 07:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 07:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 07:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 07:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/18/21 14:45	08/19/21 07:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 07:03	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/18/21 14:45	08/19/21 07:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	08/18/21 14:45	08/19/21 07:03	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/18/21 14:45	08/19/21 07:03	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 18:30	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: WSW-2

Lab Sample ID: 880-5232-8

Date Collected: 08/17/21 13:20

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 18:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 18:30	1
Total TPH	<49.9	U	49.9		mg/Kg		08/18/21 15:17	08/19/21 18:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				08/18/21 15:17	08/19/21 18:30	1
o-Terphenyl	116		70 - 130				08/18/21 15:17	08/19/21 18:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.4		4.95		mg/Kg			08/19/21 12:50	1

Client Sample ID: WSW-3

Lab Sample ID: 880-5232-9

Date Collected: 08/17/21 13:40

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 07:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 07:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 07:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/18/21 14:45	08/19/21 07:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 07:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/18/21 14:45	08/19/21 07:24	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/18/21 14:45	08/19/21 07:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130				08/18/21 14:45	08/19/21 07:24	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/18/21 14:45	08/19/21 07:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/18/21 15:20	08/19/21 06:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/18/21 15:20	08/19/21 06:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/18/21 15:20	08/19/21 06:26	1
Total TPH	<50.0	U	50.0		mg/Kg		08/18/21 15:20	08/19/21 06:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				08/18/21 15:20	08/19/21 06:26	1
o-Terphenyl	105		70 - 130				08/18/21 15:20	08/19/21 06:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		4.95		mg/Kg			08/19/21 12:55	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: WSW-4

Lab Sample ID: 880-5232-10

Date Collected: 08/17/21 14:00

Matrix: Solid

Date Received: 08/18/21 14:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 07:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 07:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 07:44	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/18/21 14:45	08/19/21 07:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:45	08/19/21 07:44	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/18/21 14:45	08/19/21 07:44	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/18/21 14:45	08/19/21 07:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	08/18/21 14:45	08/19/21 07:44	1
1,4-Difluorobenzene (Surr)	107		70 - 130	08/18/21 14:45	08/19/21 07:44	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/18/21 15:20	08/19/21 06:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/18/21 15:20	08/19/21 06:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/18/21 15:20	08/19/21 06:47	1
Total TPH	<50.0	U	50.0		mg/Kg		08/18/21 15:20	08/19/21 06:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	08/18/21 15:20	08/19/21 06:47	1
o-Terphenyl	101		70 - 130	08/18/21 15:20	08/19/21 06:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.7		5.00		mg/Kg			08/19/21 13:01	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-5215-A-15-E MS	Matrix Spike	117	103
880-5215-A-15-F MSD	Matrix Spike Duplicate	137 S1+	123
880-5232-1	NSW-1	125	99
880-5232-2	ESW-1	111	107
880-5232-3	ESW-2	135 S1+	97
880-5232-4	ESW-3	118	93
880-5232-5	ESW-4	143 S1+	94
880-5232-6	SSW-1	124	96
880-5232-7	WSW-1	142 S1+	100
880-5232-8	WSW-2	123	98
880-5232-9	WSW-3	133 S1+	96
880-5232-10	WSW-4	129	107
LCS 880-6722/1-A	Lab Control Sample	92	107
LCSD 880-6722/2-A	Lab Control Sample Dup	107	106
MB 880-6684/5-A	Method Blank	110	88
MB 880-6722/5-A	Method Blank	135 S1+	98
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-5213-A-21-H MS	Matrix Spike	90	86
880-5213-A-21-I MSD	Matrix Spike Duplicate	93	85
880-5232-1	NSW-1	119	128
880-5232-1 MS	NSW-1	98	96
880-5232-1 MSD	NSW-1	96	94
880-5232-2	ESW-1	104	115
880-5232-3	ESW-2	95	99
880-5232-4	ESW-3	84	91
880-5232-5	ESW-4	86	97
880-5232-6	SSW-1	102	119
880-5232-7	WSW-1	109	120
880-5232-8	WSW-2	104	116
880-5232-9	WSW-3	99	105
880-5232-10	WSW-4	96	101
LCS 880-6743/2-A	Lab Control Sample	101	100
LCS 880-6751/2-A	Lab Control Sample	93	93
LCSD 880-6743/3-A	Lab Control Sample Dup	102	98
LCSD 880-6751/3-A	Lab Control Sample Dup	106	110
MB 880-6743/1-A	Method Blank	113	120
MB 880-6751/1-A	Method Blank	120	131 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-6684/5-A

Matrix: Solid

Analysis Batch: 6719

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/18/21 09:00	08/18/21 13:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/18/21 09:00	08/18/21 13:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/18/21 09:00	08/18/21 13:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/18/21 09:00	08/18/21 13:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/18/21 09:00	08/18/21 13:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/18/21 09:00	08/18/21 13:00	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/18/21 09:00	08/18/21 13:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	08/18/21 09:00	08/18/21 13:00	1
1,4-Difluorobenzene (Surr)	88		70 - 130	08/18/21 09:00	08/18/21 13:00	1

Lab Sample ID: MB 880-6722/5-A

Matrix: Solid

Analysis Batch: 6719

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:15	08/18/21 23:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:15	08/18/21 23:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:15	08/18/21 23:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/18/21 14:15	08/18/21 23:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/18/21 14:15	08/18/21 23:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/18/21 14:15	08/18/21 23:53	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/18/21 14:15	08/18/21 23:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	08/18/21 14:15	08/18/21 23:53	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/18/21 14:15	08/18/21 23:53	1

Lab Sample ID: LCS 880-6722/1-A

Matrix: Solid

Analysis Batch: 6719

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09430		mg/Kg		94	70 - 130
Toluene	0.100	0.08400		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.08241		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	0.200	0.1616		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08035		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-6722/2-A

Matrix: Solid

Analysis Batch: 6719

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6722

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09095		mg/Kg		91	70 - 130	4	35
Toluene	0.100	0.08340		mg/Kg		83	70 - 130	1	35
Ethylbenzene	0.100	0.08585		mg/Kg		86	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1724		mg/Kg		86	70 - 130	6	35
o-Xylene	0.100	0.08798		mg/Kg		88	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-5215-A-15-E MS

Matrix: Solid

Analysis Batch: 6719

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6722

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0992	0.06802	F1	mg/Kg		69	70 - 130		
Toluene	<0.00199	U F1	0.0992	0.06516	F1	mg/Kg		66	70 - 130		
Ethylbenzene	<0.00199	U F1	0.0992	0.06605	F1	mg/Kg		67	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F1	0.198	0.1337	F1	mg/Kg		67	70 - 130		
o-Xylene	<0.00199	U F1	0.0992	0.06724	F1	mg/Kg		68	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-5215-A-15-F MSD

Matrix: Solid

Analysis Batch: 6719

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 6722

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0996	0.08737		mg/Kg		88	70 - 130	25	35
Toluene	<0.00199	U F1	0.0996	0.08418		mg/Kg		85	70 - 130	25	35
Ethylbenzene	<0.00199	U F1	0.0996	0.08251		mg/Kg		83	70 - 130	22	35
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1663		mg/Kg		83	70 - 130	22	35
o-Xylene	<0.00199	U F1	0.0996	0.08460		mg/Kg		85	70 - 130	23	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130
1,4-Difluorobenzene (Surr)	123		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-6743/1-A

Matrix: Solid

Analysis Batch: 6630

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6743

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/18/21 14:14	08/18/21 22:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/18/21 14:14	08/18/21 22:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/18/21 14:14	08/18/21 22:26	1
Total TPH	<50.0	U	50.0		mg/Kg		08/18/21 14:14	08/18/21 22:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	08/18/21 14:14	08/18/21 22:26	1
o-Terphenyl	120		70 - 130	08/18/21 14:14	08/18/21 22:26	1

Lab Sample ID: LCS 880-6743/2-A

Matrix: Solid

Analysis Batch: 6630

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6743

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	900.4		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1000	848.8		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: LCSD 880-6743/3-A

Matrix: Solid

Analysis Batch: 6630

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6743

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	846.7		mg/Kg		85	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	853.4		mg/Kg		85	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 880-5213-A-21-H MS

Matrix: Solid

Analysis Batch: 6630

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6743

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	903.8		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	995	750.4		mg/Kg		75	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-5213-A-21-H MS

Matrix: Solid

Analysis Batch: 6630

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6743

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 880-5213-A-21-I MSD

Matrix: Solid

Analysis Batch: 6630

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 6743

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1025		mg/Kg		103	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	771.8		mg/Kg		77	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	85		70 - 130

Lab Sample ID: MB 880-6751/1-A

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6751

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 13:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 13:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 13:30	1
Total TPH	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 13:30	1

	MB	MB					Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	120		70 - 130				08/18/21 15:17	08/19/21 13:30	1
o-Terphenyl	131	S1+	70 - 130				08/18/21 15:17	08/19/21 13:30	1

Lab Sample ID: LCS 880-6751/2-A

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6751

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	808.8		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	926.3		mg/Kg		93	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	93		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-6751/3-A

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6751

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	815.9		mg/Kg		82	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1085		mg/Kg		108	70 - 130	16	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	106		70 - 130						
o-Terphenyl	110		70 - 130						

Lab Sample ID: 880-5232-1 MS

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: NSW-1

Prep Type: Total/NA

Prep Batch: 6751

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	803.1		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	995	964.9		mg/Kg		97	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	98		70 - 130								
o-Terphenyl	96		70 - 130								

Lab Sample ID: 880-5232-1 MSD

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: NSW-1

Prep Type: Total/NA

Prep Batch: 6751

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	821.9		mg/Kg		78	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	950.9		mg/Kg		95	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	94		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-6766/1-A

Matrix: Solid

Analysis Batch: 6767

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/19/21 11:31	1

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-6766/2-A

Matrix: Solid

Analysis Batch: 6767

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	254.9		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-6766/3-A

Matrix: Solid

Analysis Batch: 6767

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	255.9		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-5232-1 MS

Matrix: Solid

Analysis Batch: 6767

Client Sample ID: NSW-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	27.0	F1	248	305.3	F1	mg/Kg		112	90 - 110		

Lab Sample ID: 880-5232-1 MSD

Matrix: Solid

Analysis Batch: 6767

Client Sample ID: NSW-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	27.0	F1	248	304.9	F1	mg/Kg		112	90 - 110	0	20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

GC VOA

Prep Batch: 6684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-6684/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 6719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5232-1	NSW-1	Total/NA	Solid	8021B	6722
880-5232-2	ESW-1	Total/NA	Solid	8021B	6722
880-5232-3	ESW-2	Total/NA	Solid	8021B	6722
880-5232-4	ESW-3	Total/NA	Solid	8021B	6722
880-5232-5	ESW-4	Total/NA	Solid	8021B	6722
880-5232-6	SSW-1	Total/NA	Solid	8021B	6722
880-5232-7	WSW-1	Total/NA	Solid	8021B	6722
880-5232-8	WSW-2	Total/NA	Solid	8021B	6722
880-5232-9	WSW-3	Total/NA	Solid	8021B	6722
880-5232-10	WSW-4	Total/NA	Solid	8021B	6722
MB 880-6684/5-A	Method Blank	Total/NA	Solid	8021B	6684
MB 880-6722/5-A	Method Blank	Total/NA	Solid	8021B	6722
LCS 880-6722/1-A	Lab Control Sample	Total/NA	Solid	8021B	6722
LCSD 880-6722/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6722
880-5215-A-15-E MS	Matrix Spike	Total/NA	Solid	8021B	6722
880-5215-A-15-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	6722

Prep Batch: 6722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5232-1	NSW-1	Total/NA	Solid	5035	
880-5232-2	ESW-1	Total/NA	Solid	5035	
880-5232-3	ESW-2	Total/NA	Solid	5035	
880-5232-4	ESW-3	Total/NA	Solid	5035	
880-5232-5	ESW-4	Total/NA	Solid	5035	
880-5232-6	SSW-1	Total/NA	Solid	5035	
880-5232-7	WSW-1	Total/NA	Solid	5035	
880-5232-8	WSW-2	Total/NA	Solid	5035	
880-5232-9	WSW-3	Total/NA	Solid	5035	
880-5232-10	WSW-4	Total/NA	Solid	5035	
MB 880-6722/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6722/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6722/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5215-A-15-E MS	Matrix Spike	Total/NA	Solid	5035	
880-5215-A-15-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 6630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5232-9	WSW-3	Total/NA	Solid	8015B NM	6743
880-5232-10	WSW-4	Total/NA	Solid	8015B NM	6743
MB 880-6743/1-A	Method Blank	Total/NA	Solid	8015B NM	6743
LCS 880-6743/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6743
LCSD 880-6743/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6743
880-5213-A-21-H MS	Matrix Spike	Total/NA	Solid	8015B NM	6743
880-5213-A-21-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	6743

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

GC Semi VOA

Prep Batch: 6743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5232-9	WSW-3	Total/NA	Solid	8015NM Prep	
880-5232-10	WSW-4	Total/NA	Solid	8015NM Prep	
MB 880-6743/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6743/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6743/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5213-A-21-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5213-A-21-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 6751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5232-1	NSW-1	Total/NA	Solid	8015NM Prep	
880-5232-2	ESW-1	Total/NA	Solid	8015NM Prep	
880-5232-3	ESW-2	Total/NA	Solid	8015NM Prep	
880-5232-4	ESW-3	Total/NA	Solid	8015NM Prep	
880-5232-5	ESW-4	Total/NA	Solid	8015NM Prep	
880-5232-6	SSW-1	Total/NA	Solid	8015NM Prep	
880-5232-7	WSW-1	Total/NA	Solid	8015NM Prep	
880-5232-8	WSW-2	Total/NA	Solid	8015NM Prep	
MB 880-6751/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6751/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6751/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5232-1 MS	NSW-1	Total/NA	Solid	8015NM Prep	
880-5232-1 MSD	NSW-1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 6802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5232-1	NSW-1	Total/NA	Solid	8015B NM	6751
880-5232-2	ESW-1	Total/NA	Solid	8015B NM	6751
880-5232-3	ESW-2	Total/NA	Solid	8015B NM	6751
880-5232-4	ESW-3	Total/NA	Solid	8015B NM	6751
880-5232-5	ESW-4	Total/NA	Solid	8015B NM	6751
880-5232-6	SSW-1	Total/NA	Solid	8015B NM	6751
880-5232-7	WSW-1	Total/NA	Solid	8015B NM	6751
880-5232-8	WSW-2	Total/NA	Solid	8015B NM	6751
MB 880-6751/1-A	Method Blank	Total/NA	Solid	8015B NM	6751
LCS 880-6751/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6751
LCSD 880-6751/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6751
880-5232-1 MS	NSW-1	Total/NA	Solid	8015B NM	6751
880-5232-1 MSD	NSW-1	Total/NA	Solid	8015B NM	6751

HPLC/IC

Leach Batch: 6766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5232-1	NSW-1	Soluble	Solid	DI Leach	
880-5232-2	ESW-1	Soluble	Solid	DI Leach	
880-5232-3	ESW-2	Soluble	Solid	DI Leach	
880-5232-4	ESW-3	Soluble	Solid	DI Leach	
880-5232-5	ESW-4	Soluble	Solid	DI Leach	
880-5232-6	SSW-1	Soluble	Solid	DI Leach	
880-5232-7	WSW-1	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

HPLC/IC (Continued)

Leach Batch: 6766 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5232-8	WSW-2	Soluble	Solid	DI Leach	
880-5232-9	WSW-3	Soluble	Solid	DI Leach	
880-5232-10	WSW-4	Soluble	Solid	DI Leach	
MB 880-6766/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6766/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6766/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5232-1 MS	NSW-1	Soluble	Solid	DI Leach	
880-5232-1 MSD	NSW-1	Soluble	Solid	DI Leach	

Analysis Batch: 6767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5232-1	NSW-1	Soluble	Solid	300.0	6766
880-5232-2	ESW-1	Soluble	Solid	300.0	6766
880-5232-3	ESW-2	Soluble	Solid	300.0	6766
880-5232-4	ESW-3	Soluble	Solid	300.0	6766
880-5232-5	ESW-4	Soluble	Solid	300.0	6766
880-5232-6	SSW-1	Soluble	Solid	300.0	6766
880-5232-7	WSW-1	Soluble	Solid	300.0	6766
880-5232-8	WSW-2	Soluble	Solid	300.0	6766
880-5232-9	WSW-3	Soluble	Solid	300.0	6766
880-5232-10	WSW-4	Soluble	Solid	300.0	6766
MB 880-6766/1-A	Method Blank	Soluble	Solid	300.0	6766
LCS 880-6766/2-A	Lab Control Sample	Soluble	Solid	300.0	6766
LCSD 880-6766/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6766
880-5232-1 MS	NSW-1	Soluble	Solid	300.0	6766
880-5232-1 MSD	NSW-1	Soluble	Solid	300.0	6766

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: NSW-1

Lab Sample ID: 880-5232-1

Date Collected: 08/17/21 10:00

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 04:40	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6751	08/18/21 15:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 14:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 11:48	CH	XEN MID

Client Sample ID: ESW-1

Lab Sample ID: 880-5232-2

Date Collected: 08/17/21 10:20

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 05:01	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6751	08/18/21 15:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 15:37	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 12:05	CH	XEN MID

Client Sample ID: ESW-2

Lab Sample ID: 880-5232-3

Date Collected: 08/17/21 10:40

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 05:21	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6751	08/18/21 15:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 15:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 12:10	CH	XEN MID

Client Sample ID: ESW-3

Lab Sample ID: 880-5232-4

Date Collected: 08/17/21 11:00

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 05:41	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6751	08/18/21 15:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 16:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 12:16	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: ESW-4

Lab Sample ID: 880-5232-5

Date Collected: 08/17/21 11:20

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 06:02	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	6751	08/18/21 15:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 16:48	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 12:22	CH	XEN MID

Client Sample ID: SSW-1

Lab Sample ID: 880-5232-6

Date Collected: 08/17/21 12:00

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 06:22	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6751	08/18/21 15:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 17:09	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 12:38	CH	XEN MID

Client Sample ID: WSW-1

Lab Sample ID: 880-5232-7

Date Collected: 08/17/21 13:00

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 06:43	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6751	08/18/21 15:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 18:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 12:44	CH	XEN MID

Client Sample ID: WSW-2

Lab Sample ID: 880-5232-8

Date Collected: 08/17/21 13:20

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 07:03	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6751	08/18/21 15:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 18:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 12:50	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Client Sample ID: WSW-3

Lab Sample ID: 880-5232-9

Date Collected: 08/17/21 13:40

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 07:24	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6743	08/18/21 15:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6630	08/19/21 06:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 12:55	CH	XEN MID

Client Sample ID: WSW-4

Lab Sample ID: 880-5232-10

Date Collected: 08/17/21 14:00

Matrix: Solid

Date Received: 08/18/21 14:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	6722	08/18/21 14:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6719	08/19/21 07:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	6743	08/18/21 15:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6630	08/19/21 06:47	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6766	08/18/21 17:12	SC	XEN MID
Soluble	Analysis	300.0		1			6767	08/19/21 13:01	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Tetra Tech General

Job ID: 880-5232-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-5232-1	NSW-1	Solid	08/17/21 10:00	08/18/21 14:37
880-5232-2	ESW-1	Solid	08/17/21 10:20	08/18/21 14:37
880-5232-3	ESW-2	Solid	08/17/21 10:40	08/18/21 14:37
880-5232-4	ESW-3	Solid	08/17/21 11:00	08/18/21 14:37
880-5232-5	ESW-4	Solid	08/17/21 11:20	08/18/21 14:37
880-5232-6	SSW-1	Solid	08/17/21 12:00	08/18/21 14:37
880-5232-7	WSW-1	Solid	08/17/21 13:00	08/18/21 14:37
880-5232-8	WSW-2	Solid	08/17/21 13:20	08/18/21 14:37
880-5232-9	WSW-3	Solid	08/17/21 13:40	08/18/21 14:37
880-5232-10	WSW-4	Solid	08/17/21 14:00	08/18/21 14:37

Analysis Request of Chain of Custody Record

**Tetra Tech, Inc.**901 West Wall Street, Suite 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

860-5232 Chain of Custody

Client Name: Caroco Phillips / h ConchoSite Manager: Joe, Tyler

Project Name:

King Tut Federal CTB Release

Contact Info:

Email: Joe Tyler@tetra-tech.com
Phone: 432-687-8139Project Location:
(county, state)Lea County, NM

Project #:

212C-MD-03530A

Invoice to:

Accounts Payable
901 West Wall Street, Suite 100 Midland, Texas 79701

Receiving Laboratory:

XERO

Sampler Signature:

Comments:

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLING
YEAR 2021
DATE TIMEMATRIX
WATER
SOIL
HCL
HNO₃
ICE
NONE

CONTAINERS

FILTERED (Y/N)

BTX 8021B BTX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO DRO - ORO MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol 8260B / 624

GC/MS Semi Vol 8270C/625

PCBs 8082 / 608

NORM

PLM (Asbestos)

Chloride 300 0

Chloride Sulfate (DS)

General Water Chemistry (see attached list)

Anion/Cation Balance

TPH 8015R

ANALYSIS REQUEST

(Circle or Specify Method No.)

1 of 1

8/19/2021

Page 26 of 20

ORIGINAL COPY

Relinquished by:

Date Time

Received by:

Date Time

Relinquished by:

Date Time

Received by:

Date Time

Relinquished by:

Date Time

Received by:

Date Time

LAB USE ONLY

REMARKS:

☐ Standard☒ RUSH 24 hr☐ Rush Charges Authorized☐ Special Report Limits or TRRP Report

Sample Temperature

-14/-1.9

(Circle) HAND DELIVERED FEDEX UPS Tracking #

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-5232-1

SDG Number: Lea County, NM

Login Number: 5232

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-5271-1

Laboratory Sample Delivery Group: Lea County, NM
Client Project/Site: King Tut CTB

For:

Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Attn: Joe Tyler

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

Authorized for release by:
8/23/2021 1:17:42 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Laboratory Job ID: 880-5271-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Xenco, Midland

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Job ID: 880-5271-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-5271-1

Receipt

The samples were received on 8/19/2021 2:43 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.6°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-6816 and analytical batch 880-6774 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Client Sample ID: Floor-1 (3')

Date Collected: 08/18/21 10:00

Date Received: 08/19/21 14:43

Lab Sample ID: 880-5271-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F2 F1	0.00200		mg/Kg		08/19/21 14:53	08/20/21 12:35	1
Toluene	<0.00200	U F2 F1	0.00200		mg/Kg		08/19/21 14:53	08/20/21 12:35	1
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		08/19/21 14:53	08/20/21 12:35	1
m-Xylene & p-Xylene	<0.00399	U F1	0.00399		mg/Kg		08/19/21 14:53	08/20/21 12:35	1
o-Xylene	<0.00200	U F1	0.00200		mg/Kg		08/19/21 14:53	08/20/21 12:35	1
Xylenes, Total	<0.00399	U F1	0.00399		mg/Kg		08/19/21 14:53	08/20/21 12:35	1
Total BTEX	<0.00399	U F2 F1	0.00399		mg/Kg		08/19/21 14:53	08/20/21 12:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	08/19/21 14:53	08/20/21 12:35	1
1,4-Difluorobenzene (Surr)	120		70 - 130	08/19/21 14:53	08/20/21 12:35	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/19/21 16:40	08/19/21 19:54	1
Diesel Range Organics (Over C10-C28)	126		50.0		mg/Kg		08/19/21 16:40	08/19/21 19:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/19/21 16:40	08/19/21 19:54	1
Total TPH	126		50.0		mg/Kg		08/19/21 16:40	08/19/21 19:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	08/19/21 16:40	08/19/21 19:54	1
o-Terphenyl	122		70 - 130	08/19/21 16:40	08/19/21 19:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	147		4.97		mg/Kg			08/20/21 10:18	1

Client Sample ID: Floor-2 (3')

Date Collected: 08/18/21 11:00

Date Received: 08/19/21 14:43

Lab Sample ID: 880-5271-2

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/19/21 14:53	08/20/21 12:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/19/21 14:53	08/20/21 12:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/19/21 14:53	08/20/21 12:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/19/21 14:53	08/20/21 12:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/19/21 14:53	08/20/21 12:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/19/21 14:53	08/20/21 12:55	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/19/21 14:53	08/20/21 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	08/19/21 14:53	08/20/21 12:55	1
1,4-Difluorobenzene (Surr)	102		70 - 130	08/19/21 14:53	08/20/21 12:55	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/19/21 16:40	08/19/21 20:15	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Client Sample ID: Floor-2 (3')

Date Collected: 08/18/21 11:00

Date Received: 08/19/21 14:43

Lab Sample ID: 880-5271-2

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/19/21 16:40	08/19/21 20:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/19/21 16:40	08/19/21 20:15	1
Total TPH	<50.0	U	50.0		mg/Kg		08/19/21 16:40	08/19/21 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				08/19/21 16:40	08/19/21 20:15	1
o-Terphenyl	120		70 - 130				08/19/21 16:40	08/19/21 20:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.5		4.95		mg/Kg			08/20/21 10:24	1

Client Sample ID: Floor-3(3')

Date Collected: 08/18/21 13:00

Date Received: 08/19/21 14:43

Lab Sample ID: 880-5271-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/19/21 14:53	08/20/21 13:16	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/19/21 14:53	08/20/21 13:16	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/19/21 14:53	08/20/21 13:16	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/19/21 14:53	08/20/21 13:16	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/19/21 14:53	08/20/21 13:16	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/19/21 14:53	08/20/21 13:16	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		08/19/21 14:53	08/20/21 13:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				08/19/21 14:53	08/20/21 13:16	1
1,4-Difluorobenzene (Surr)	101		70 - 130				08/19/21 14:53	08/20/21 13:16	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/19/21 16:40	08/19/21 20:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/19/21 16:40	08/19/21 20:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/19/21 16:40	08/19/21 20:36	1
Total TPH	<49.9	U	49.9		mg/Kg		08/19/21 16:40	08/19/21 20:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				08/19/21 16:40	08/19/21 20:36	1
o-Terphenyl	125		70 - 130				08/19/21 16:40	08/19/21 20:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	213		4.99		mg/Kg			08/20/21 10:29	1

Eurofins Xenco, Midland

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Client Sample ID: Floor-4 (2')

Lab Sample ID: 880-5271-4

Date Collected: 08/18/21 14:00

Matrix: Solid

Date Received: 08/19/21 14:43

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/19/21 14:53	08/20/21 13:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/19/21 14:53	08/20/21 13:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/19/21 14:53	08/20/21 13:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/19/21 14:53	08/20/21 13:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/19/21 14:53	08/20/21 13:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/19/21 14:53	08/20/21 13:36	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/19/21 14:53	08/20/21 13:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	08/19/21 14:53	08/20/21 13:36	1
1,4-Difluorobenzene (Surr)	103		70 - 130	08/19/21 14:53	08/20/21 13:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/19/21 16:40	08/19/21 20:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/19/21 16:40	08/19/21 20:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/19/21 16:40	08/19/21 20:57	1
Total TPH	<49.9	U	49.9		mg/Kg		08/19/21 16:40	08/19/21 20:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	08/19/21 16:40	08/19/21 20:57	1
o-Terphenyl	123		70 - 130	08/19/21 16:40	08/19/21 20:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.2		5.04		mg/Kg			08/20/21 10:46	1

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-5271-1	Floor-1 (3')	125	120
880-5271-1 MS	Floor-1 (3')	128	104
880-5271-1 MSD	Floor-1 (3')	95	97
880-5271-2	Floor-2 (3')	103	102
880-5271-3	Floor-3 (3')	98	101
880-5271-4	Floor-4 (2')	100	103
LCS 880-6816/1-A	Lab Control Sample	89	99
LCSD 880-6816/2-A	Lab Control Sample Dup	92	102
MB 880-6774/8	Method Blank	123	97
MB 880-6816/5-A	Method Blank	115	106

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-5232-A-1-C MS	Matrix Spike	98	96
880-5232-A-1-D MSD	Matrix Spike Duplicate	96	94
880-5271-1	Floor-1 (3')	109	122
880-5271-2	Floor-2 (3')	106	120
880-5271-3	Floor-3 (3')	110	125
880-5271-4	Floor-4 (2')	108	123
LCS 880-6751/2-A	Lab Control Sample	93	93
LCSD 880-6751/3-A	Lab Control Sample Dup	106	110
MB 880-6751/1-A	Method Blank	120	131 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-6774/8

Matrix: Solid

Analysis Batch: 6774

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			08/20/21 00:07	1
Toluene	<0.00200	U	0.00200		mg/Kg			08/20/21 00:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			08/20/21 00:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			08/20/21 00:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			08/20/21 00:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			08/20/21 00:07	1
Total BTEX	<0.00400	U	0.00400		mg/Kg			08/20/21 00:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130		08/20/21 00:07	1
1,4-Difluorobenzene (Surr)	97		70 - 130		08/20/21 00:07	1

Lab Sample ID: MB 880-6816/5-A

Matrix: Solid

Analysis Batch: 6774

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/19/21 14:53	08/20/21 12:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/19/21 14:53	08/20/21 12:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/19/21 14:53	08/20/21 12:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/19/21 14:53	08/20/21 12:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/19/21 14:53	08/20/21 12:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/19/21 14:53	08/20/21 12:06	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/19/21 14:53	08/20/21 12:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	08/19/21 14:53	08/20/21 12:06	1
1,4-Difluorobenzene (Surr)	106		70 - 130	08/19/21 14:53	08/20/21 12:06	1

Lab Sample ID: LCS 880-6816/1-A

Matrix: Solid

Analysis Batch: 6774

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6816

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1008		mg/Kg		101	70 - 130
Toluene	0.100	0.09251		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.08519		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1647		mg/Kg		82	70 - 130
o-Xylene	0.100	0.07883		mg/Kg		79	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-6816/2-A

Matrix: Solid

Analysis Batch: 6774

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6816

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1088		mg/Kg		109	70 - 130	8	35
Toluene	0.100	0.09182		mg/Kg		92	70 - 130	1	35
Ethylbenzene	0.100	0.08546		mg/Kg		85	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1681		mg/Kg		84	70 - 130	2	35
o-Xylene	0.100	0.08229		mg/Kg		82	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-5271-1 MS

Matrix: Solid

Analysis Batch: 6774

Client Sample ID: Floor-1 (3')

Prep Type: Total/NA

Prep Batch: 6816

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.0998	0.03338	F1	mg/Kg		33	70 - 130		
Toluene	<0.00200	U F2 F1	0.0998	0.03153	F1	mg/Kg		32	70 - 130		
Ethylbenzene	<0.00200	U F1	0.0998	0.04329	F1	mg/Kg		43	70 - 130		
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.07552	F1	mg/Kg		38	70 - 130		
o-Xylene	<0.00200	U F1	0.0998	0.05022	F1	mg/Kg		50	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-5271-1 MSD

Matrix: Solid

Analysis Batch: 6774

Client Sample ID: Floor-1 (3')

Prep Type: Total/NA

Prep Batch: 6816

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.0994	0.07066	F2	mg/Kg		71	70 - 130	72	35
Toluene	<0.00200	U F2 F1	0.0994	0.06048	F2 F1	mg/Kg		61	70 - 130	63	35
Ethylbenzene	<0.00200	U F1	0.0994	0.05463	F1	mg/Kg		55	70 - 130	23	35
m-Xylene & p-Xylene	<0.00399	U F1	0.199	0.1056	F1	mg/Kg		53	70 - 130	33	35
o-Xylene	<0.00200	U F1	0.0994	0.05124	F1	mg/Kg		51	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-6751/1-A

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6751

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 13:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 13:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 13:30	1
Total TPH	<50.0	U	50.0		mg/Kg		08/18/21 15:17	08/19/21 13:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	08/18/21 15:17	08/19/21 13:30	1
o-Terphenyl	131	S1+	70 - 130	08/18/21 15:17	08/19/21 13:30	1

Lab Sample ID: LCS 880-6751/2-A

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6751

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	808.8		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	926.3		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-6751/3-A

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6751

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	815.9		mg/Kg		82	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1085		mg/Kg		108	70 - 130	16	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 880-5232-A-1-C MS

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6751

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	803.1		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	995	964.9		mg/Kg		97	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-5232-A-1-C MS

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6751

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: 880-5232-A-1-D MSD

Matrix: Solid

Analysis Batch: 6802

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 6751

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	821.9		mg/Kg		78	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	950.9		mg/Kg		95	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	94		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-6817/1-A

Matrix: Solid

Analysis Batch: 6822

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/20/21 08:54	1

Lab Sample ID: LCS 880-6817/2-A

Matrix: Solid

Analysis Batch: 6822

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	252.5		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-6817/3-A

Matrix: Solid

Analysis Batch: 6822

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	253.0		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-5271-3 MS

Matrix: Solid

Analysis Batch: 6822

Client Sample ID: Floor-3(3')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	213		250	456.5		mg/Kg		98	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-5271-3 MSD						Client Sample ID: Floor-3(3')					
Matrix: Solid						Prep Type: Soluble					
Analysis Batch: 6822											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	213		250	458.3		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 6774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5271-1	Floor-1 (3')	Total/NA	Solid	8021B	6816
880-5271-2	Floor-2 (3')	Total/NA	Solid	8021B	6816
880-5271-3	Floor-3 (3')	Total/NA	Solid	8021B	6816
880-5271-4	Floor-4 (2')	Total/NA	Solid	8021B	6816
MB 880-6774/8	Method Blank	Total/NA	Solid	8021B	
MB 880-6816/5-A	Method Blank	Total/NA	Solid	8021B	6816
LCS 880-6816/1-A	Lab Control Sample	Total/NA	Solid	8021B	6816
LCSD 880-6816/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6816
880-5271-1 MS	Floor-1 (3')	Total/NA	Solid	8021B	6816
880-5271-1 MSD	Floor-1 (3')	Total/NA	Solid	8021B	6816

Prep Batch: 6816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5271-1	Floor-1 (3')	Total/NA	Solid	5035	
880-5271-2	Floor-2 (3')	Total/NA	Solid	5035	
880-5271-3	Floor-3 (3')	Total/NA	Solid	5035	
880-5271-4	Floor-4 (2')	Total/NA	Solid	5035	
MB 880-6816/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6816/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6816/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5271-1 MS	Floor-1 (3')	Total/NA	Solid	5035	
880-5271-1 MSD	Floor-1 (3')	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 6751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5271-1	Floor-1 (3')	Total/NA	Solid	8015NM Prep	
880-5271-2	Floor-2 (3')	Total/NA	Solid	8015NM Prep	
880-5271-3	Floor-3 (3')	Total/NA	Solid	8015NM Prep	
880-5271-4	Floor-4 (2')	Total/NA	Solid	8015NM Prep	
MB 880-6751/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6751/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6751/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5232-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5232-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 6802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5271-1	Floor-1 (3')	Total/NA	Solid	8015B NM	6751
880-5271-2	Floor-2 (3')	Total/NA	Solid	8015B NM	6751
880-5271-3	Floor-3 (3')	Total/NA	Solid	8015B NM	6751
880-5271-4	Floor-4 (2')	Total/NA	Solid	8015B NM	6751
MB 880-6751/1-A	Method Blank	Total/NA	Solid	8015B NM	6751
LCS 880-6751/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6751
LCSD 880-6751/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6751
880-5232-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	6751
880-5232-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	6751

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

HPLC/IC

Leach Batch: 6817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5271-1	Floor-1 (3')	Soluble	Solid	DI Leach	
880-5271-2	Floor-2 (3')	Soluble	Solid	DI Leach	
880-5271-3	Floor-3(3')	Soluble	Solid	DI Leach	
880-5271-4	Floor-4 (2')	Soluble	Solid	DI Leach	
MB 880-6817/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6817/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6817/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5271-3 MS	Floor-3(3')	Soluble	Solid	DI Leach	
880-5271-3 MSD	Floor-3(3')	Soluble	Solid	DI Leach	

Analysis Batch: 6822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5271-1	Floor-1 (3')	Soluble	Solid	300.0	6817
880-5271-2	Floor-2 (3')	Soluble	Solid	300.0	6817
880-5271-3	Floor-3(3')	Soluble	Solid	300.0	6817
880-5271-4	Floor-4 (2')	Soluble	Solid	300.0	6817
MB 880-6817/1-A	Method Blank	Soluble	Solid	300.0	6817
LCS 880-6817/2-A	Lab Control Sample	Soluble	Solid	300.0	6817
LCSD 880-6817/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6817
880-5271-3 MS	Floor-3(3')	Soluble	Solid	300.0	6817
880-5271-3 MSD	Floor-3(3')	Soluble	Solid	300.0	6817

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Client Sample ID: Floor-1 (3')

Date Collected: 08/18/21 10:00

Date Received: 08/19/21 14:43

Lab Sample ID: 880-5271-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	6816	08/19/21 14:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6774	08/20/21 12:35	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6751	08/19/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 19:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	6817	08/19/21 15:09	SC	XEN MID
Soluble	Analysis	300.0		1			6822	08/20/21 10:18	CH	XEN MID

Client Sample ID: Floor-2 (3')

Date Collected: 08/18/21 11:00

Date Received: 08/19/21 14:43

Lab Sample ID: 880-5271-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	6816	08/19/21 14:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6774	08/20/21 12:55	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	6751	08/19/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 20:15	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6817	08/19/21 15:09	SC	XEN MID
Soluble	Analysis	300.0		1			6822	08/20/21 10:24	CH	XEN MID

Client Sample ID: Floor-3(3')

Date Collected: 08/18/21 13:00

Date Received: 08/19/21 14:43

Lab Sample ID: 880-5271-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	6816	08/19/21 14:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6774	08/20/21 13:16	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6751	08/19/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 20:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	6817	08/19/21 15:09	SC	XEN MID
Soluble	Analysis	300.0		1			6822	08/20/21 10:29	CH	XEN MID

Client Sample ID: Floor-4 (2')

Date Collected: 08/18/21 14:00

Date Received: 08/19/21 14:43

Lab Sample ID: 880-5271-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	6816	08/19/21 14:53	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6774	08/20/21 13:36	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6751	08/19/21 16:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6802	08/19/21 20:57	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	6817	08/19/21 15:09	SC	XEN MID
Soluble	Analysis	300.0		1			6822	08/20/21 10:46	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB

Job ID: 880-5271-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-5271-1	Floor-1 (3')	Solid	08/18/21 10:00	08/19/21 14:43
880-5271-2	Floor-2 (3')	Solid	08/18/21 11:00	08/19/21 14:43
880-5271-3	Floor-3(3')	Solid	08/18/21 13:00	08/19/21 14:43
880-5271-4	Floor-4 (2')	Solid	08/18/21 14:00	08/19/21 14:43

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

880-5271 Chain of Custody

Page

01 of 01

8/23/2021

Client Name Conoco Phillips / Hondo		Site Manager Joe Tyler	
Project Name King Tut CTB		Contact Info Email joe.tyler@tetra-tech.com Phone (432) 210-6952	
Project Location (County, State) Lea County, New Mexico		Project # 212C-MD-08530A	
Invoice to Accounts Payable 901 West Wall Street, Suite 100 Midland Texas 79701			
Receiving Laboratory. Xenco		Sampler Signature Mat	
Comments			
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING	
		YEAR 2021	MATRIX
		DATE	TIME
		WATER	SOIL
		HCL	HNO ₃
		ICE	NONE
		# CONTAINERS	
		FILTERED (Y/N)	
		BTEX 8021B	BTEX 8260B
		TPH TX1005 (Ext to C35)	
		TPH 8015M (GRO - DRO - ORO - MRO)	
		PAH 8270C	
		Total Metals Ag As Ba Cd Cr Pb Se Hg	
		TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
		TCLP Volatiles	
		TCLP Semi Volatiles	
		RCI	
		GC/MS Vol 8260B / 624	
		GC/MS Semi Vol 8270C/625	
		PCB's 8082 / 608	
		NORM	
		PLM (Asbestos)	
		Chloride 300 0	
		Chloride Sulfate TDS	
		General Water Chemistry (see attached list)	
		Anion/Cation Balance	
		TPH 8015R	
Relinquished by	Date 8-19-2021	Time 1441	Received by William
Relinquished by	Date	Time	Date
Relinquished by	Date	Time	Date

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

101/104

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.)

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-5271-1

SDG Number: Lea County, NM

Login Number: 5271

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-5361-1

Laboratory Sample Delivery Group: Lea County, NM
Client Project/Site: King Tut CTB Release

For:

Tetra Tech, Inc.
901 W Wall
Ste 100
Midland, Texas 79701

Attn: Joe Tyler

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

Authorized for release by:
8/25/2021 9:58:56 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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results through

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Laboratory Job ID: 880-5361-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Job ID: 880-5361-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-5361-1

Receipt

The sample was received on 8/24/2021 8:43 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -4.9°C

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Client Sample ID: Floor-1 (4')

Lab Sample ID: 880-5361-1

Date Collected: 08/23/21 14:00

Matrix: Solid

Date Received: 08/24/21 08:43

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/24/21 09:00	08/24/21 19:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/24/21 09:00	08/24/21 19:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/24/21 09:00	08/24/21 19:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/24/21 09:00	08/24/21 19:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/24/21 09:00	08/24/21 19:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/24/21 09:00	08/24/21 19:59	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		08/24/21 09:00	08/24/21 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	08/24/21 09:00	08/24/21 19:59	1
1,4-Difluorobenzene (Surr)	79		70 - 130	08/24/21 09:00	08/24/21 19:59	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/24/21 10:46	08/24/21 12:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/24/21 10:46	08/24/21 12:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/24/21 10:46	08/24/21 12:52	1
Total TPH	<50.0	U	50.0		mg/Kg		08/24/21 10:46	08/24/21 12:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	08/24/21 10:46	08/24/21 12:52	1
o-Terphenyl	99		70 - 130	08/24/21 10:46	08/24/21 12:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81.3		5.00		mg/Kg			08/24/21 14:44	1

Eurofins Xenco, Midland

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-5354-A-1-A MS	Matrix Spike	100	94
880-5354-A-1-B MSD	Matrix Spike Duplicate	101	88
880-5361-1	Floor-1 (4')	116	79
LCS 880-6966/1-A	Lab Control Sample	93	119
LCSD 880-6966/2-A	Lab Control Sample Dup	107	128
MB 880-6933/5-A	Method Blank	67 S1-	98
MB 880-6966/5-A	Method Blank	66 S1-	100
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-5361-1	Floor-1 (4')	89	99
880-5361-1 MS	Floor-1 (4')	88	90
880-5361-1 MSD	Floor-1 (4')	87	89
LCS 880-6994/2-A	Lab Control Sample	88	95
LCSD 880-6994/3-A	Lab Control Sample Dup	90	97
MB 880-6994/1-A	Method Blank	93	61 S1-
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-6933/5-A

Matrix: Solid

Analysis Batch: 6955

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6933

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/23/21 09:56	08/23/21 16:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/23/21 09:56	08/23/21 16:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/23/21 09:56	08/23/21 16:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/23/21 09:56	08/23/21 16:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/23/21 09:56	08/23/21 16:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/23/21 09:56	08/23/21 16:34	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/23/21 09:56	08/23/21 16:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	67	S1-	70 - 130	08/23/21 09:56	08/23/21 16:34	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/23/21 09:56	08/23/21 16:34	1

Lab Sample ID: MB 880-6966/5-A

Matrix: Solid

Analysis Batch: 6955

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/23/21 16:10	08/24/21 05:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/23/21 16:10	08/24/21 05:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/23/21 16:10	08/24/21 05:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/23/21 16:10	08/24/21 05:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/23/21 16:10	08/24/21 05:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/23/21 16:10	08/24/21 05:53	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/23/21 16:10	08/24/21 05:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	66	S1-	70 - 130	08/23/21 16:10	08/24/21 05:53	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/23/21 16:10	08/24/21 05:53	1

Lab Sample ID: LCS 880-6966/1-A

Matrix: Solid

Analysis Batch: 6955

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1018		mg/Kg		102	70 - 130
Toluene	0.100	0.09490		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.1030		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	0.200	0.2059		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1006		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	119		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-6966/2-A

Matrix: Solid

Analysis Batch: 6955

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6966

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1082		mg/Kg		108	70 - 130	6	35
Toluene	0.100	0.1095		mg/Kg		109	70 - 130	14	35
Ethylbenzene	0.100	0.1109		mg/Kg		111	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2226		mg/Kg		111	70 - 130	8	35
o-Xylene	0.100	0.1091		mg/Kg		109	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	128		70 - 130

Lab Sample ID: 880-5354-A-1-A MS

Matrix: Solid

Analysis Batch: 6955

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 6966

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.100	0.05931	F1	mg/Kg		59	70 - 130		
Toluene	<0.00200	U F1	0.100	0.05513	F1	mg/Kg		54	70 - 130		
Ethylbenzene	<0.00200	U F1	0.100	0.04293	F1	mg/Kg		42	70 - 130		
m-Xylene & p-Xylene	0.00551	F1	0.201	0.09108	F1	mg/Kg		43	70 - 130		
o-Xylene	0.00219	F1	0.100	0.03916	F1	mg/Kg		37	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-5354-A-1-B MSD

Matrix: Solid

Analysis Batch: 6955

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 6966

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.100	0.04851	F1	mg/Kg		49	70 - 130	20	35
Toluene	<0.00200	U F1	0.100	0.04880	F1	mg/Kg		48	70 - 130	12	35
Ethylbenzene	<0.00200	U F1	0.100	0.03784	F1	mg/Kg		37	70 - 130	13	35
m-Xylene & p-Xylene	0.00551	F1	0.200	0.08073	F1	mg/Kg		38	70 - 130	12	35
o-Xylene	0.00219	F1	0.100	0.03978	F1	mg/Kg		38	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-6994/1-A

Matrix: Solid

Analysis Batch: 6980

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 6994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/24/21 10:46	08/24/21 11:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/24/21 10:46	08/24/21 11:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/24/21 10:46	08/24/21 11:47	1
Total TPH	<50.0	U	50.0		mg/Kg		08/24/21 10:46	08/24/21 11:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	08/24/21 10:46	08/24/21 11:47	1
o-Terphenyl	61	S1-	70 - 130	08/24/21 10:46	08/24/21 11:47	1

Lab Sample ID: LCS 880-6994/2-A

Matrix: Solid

Analysis Batch: 6980

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 6994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	879.3		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	954.7		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: LCSD 880-6994/3-A

Matrix: Solid

Analysis Batch: 6980

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 6994

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	896.6		mg/Kg		90	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	965.5		mg/Kg		97	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 880-5361-1 MS

Matrix: Solid

Analysis Batch: 6980

Client Sample ID: Floor-1 (4')

Prep Type: Total/NA

Prep Batch: 6994

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	995	838.6		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	995	930.2		mg/Kg		93	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-5361-1 MS

Matrix: Solid

Analysis Batch: 6980

Client Sample ID: Floor-1 (4')

Prep Type: Total/NA

Prep Batch: 6994

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-5361-1 MSD

Matrix: Solid

Analysis Batch: 6980

Client Sample ID: Floor-1 (4')

Prep Type: Total/NA

Prep Batch: 6994

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	847.8		mg/Kg		85	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	921.8		mg/Kg		92	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	89		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-6986/1-A

Matrix: Solid

Analysis Batch: 7015

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			08/24/21 13:25	1	

Lab Sample ID: LCS 880-6986/2-A

Matrix: Solid

Analysis Batch: 7015

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	267.2		mg/Kg		107	90 - 110			

Lab Sample ID: LCSD 880-6986/3-A

Matrix: Solid

Analysis Batch: 7015

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	267.6		mg/Kg		107	90 - 110	0	20	

Lab Sample ID: 880-5360-A-1-D MS

Matrix: Solid

Analysis Batch: 7015

Client Sample ID: Matrix Spike

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	1620		1250	2870		mg/Kg		100	90 - 110		

Eurofins Xenco, Midland

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-5360-A-1-E MSD					Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 7015												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Chloride	1620		1250	2874		mg/Kg		101	90 - 110	0	20	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

GC VOA

Prep Batch: 6933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-6933/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 6955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5361-1	Floor-1 (4')	Total/NA	Solid	8021B	6966
MB 880-6933/5-A	Method Blank	Total/NA	Solid	8021B	6933
MB 880-6966/5-A	Method Blank	Total/NA	Solid	8021B	6966
LCS 880-6966/1-A	Lab Control Sample	Total/NA	Solid	8021B	6966
LCSD 880-6966/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6966
880-5354-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	6966
880-5354-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	6966

Prep Batch: 6966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5361-1	Floor-1 (4')	Total/NA	Solid	5035	
MB 880-6966/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6966/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6966/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5354-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-5354-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 6980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5361-1	Floor-1 (4')	Total/NA	Solid	8015B NM	6994
MB 880-6994/1-A	Method Blank	Total/NA	Solid	8015B NM	6994
LCS 880-6994/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6994
LCSD 880-6994/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6994
880-5361-1 MS	Floor-1 (4')	Total/NA	Solid	8015B NM	6994
880-5361-1 MSD	Floor-1 (4')	Total/NA	Solid	8015B NM	6994

Prep Batch: 6994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5361-1	Floor-1 (4')	Total/NA	Solid	8015NM Prep	
MB 880-6994/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6994/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6994/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5361-1 MS	Floor-1 (4')	Total/NA	Solid	8015NM Prep	
880-5361-1 MSD	Floor-1 (4')	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 6986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5361-1	Floor-1 (4')	Soluble	Solid	DI Leach	
MB 880-6986/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6986/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6986/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5360-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-5360-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

HPLC/IC

Analysis Batch: 7015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5361-1	Floor-1 (4')	Soluble	Solid	300.0	6986
MB 880-6986/1-A	Method Blank	Soluble	Solid	300.0	6986
LCS 880-6986/2-A	Lab Control Sample	Soluble	Solid	300.0	6986
LCSD 880-6986/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6986
880-5360-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	6986
880-5360-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	6986

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Client Sample ID: Floor-1 (4')

Date Collected: 08/23/21 14:00

Date Received: 08/24/21 08:43

Lab Sample ID: 880-5361-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	6966	08/24/21 09:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6955	08/24/21 19:59	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6994	08/24/21 10:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6980	08/24/21 12:52	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6986	08/24/21 10:28	CH	XEN MID
Soluble	Analysis	300.0		1			7015	08/24/21 14:44	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: King Tut CTB Release

Job ID: 880-5361-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-5361-1	Floor-1 (4')	Solid	08/23/21 14:00	08/24/21 08:43

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

880-5361 Chain of Custody

AVAILABILITY

(Circle or Specify Method No.)

Client Name: Alameda

Site Manager: Joe Tyler

Project Name: King Tut CTB Release

Contact Info:

Email Joe.Tyler@tetra-tech.com
Phone 432-703-0952

Project Location: Leon County NM

Project #: 2126-WD-02530A

Invoice to: Accounts Payable
901 West Wall Street, Suite 100 Midland, Texas 79701

Receiving Laboratory: Yenid

Sampler Signature: [Signature]

Comments:

LAB #
(LAB USE ONLY)

SAMPLE IDENTIFICATION

SAMPLING
YEAR 2021
DATE TIME

MATRIX
WATER
SOIL
HCL
HNO₃
ICE
NONE

PRESERVATIVE METHOD
CONTAINERS
FILTERED (Y/N)

Flour - 1 (4)

8-23-21 1400

X

X

1

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

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 300 0
Chloride Sulfate TDS
General Water Chemistry (see attached list)
Anion/Cation Balance
TPH 8015R

HOLD: 10

Relinquished by: [Signature]

Received by: [Signature]

LAB USE ONLY

REMARKS:

8/24/21 8:41

8/24/21 8:41

8/24/21 8:41

4:41

☒ RUSH 24 hr

☐ Standard

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

Sample Temperature

4.0

4.0

4.0

4.0

4.0

4.0

4.0

4.0

4.0

4.0

4.0

LAB USE ONLY

REMARKS:

☒ RUSH 24 hr

☐ Standard

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

☐ Special Report Limits or TRRP Report

LAB USE ONLY

REMARKS:

☒ RUSH 24 hr

☐ Standard

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-5361-1

SDG Number: Lea County, NM

Login Number: 5361

List Number: 1

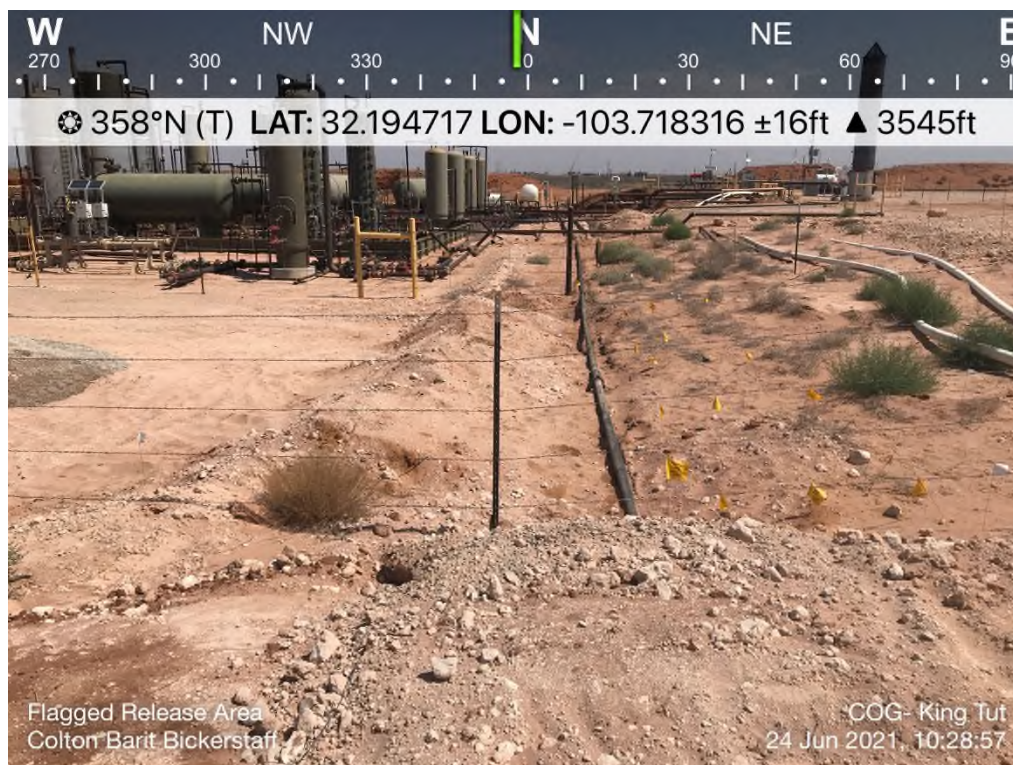
Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

APPENDIX D

Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View north of release footprint.	1
	SITE NAME	King Tut Federal CTB Release	6/24/2021



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View west of release footprint.	2
	SITE NAME	King Tut Federal CTB Release	6/24/2021



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View southwest of initial excavation activities within release footprint.	3
	SITE NAME	King Tut Federal CTB Release	8/17/2021



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View southeast of initial excavation within release footprint.	4
	SITE NAME	King Tut Federal CTB Release	8/17/2021



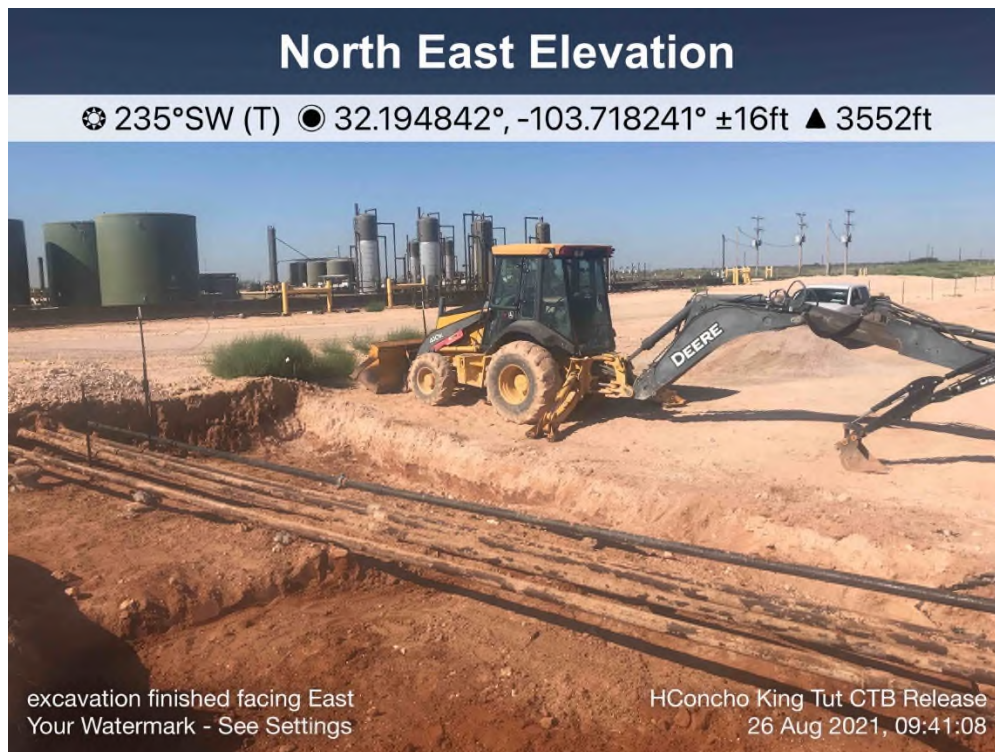
TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View southwest of continued excavation within release footprint.	5
	SITE NAME	King Tut Federal CTB Release	8/19/2021



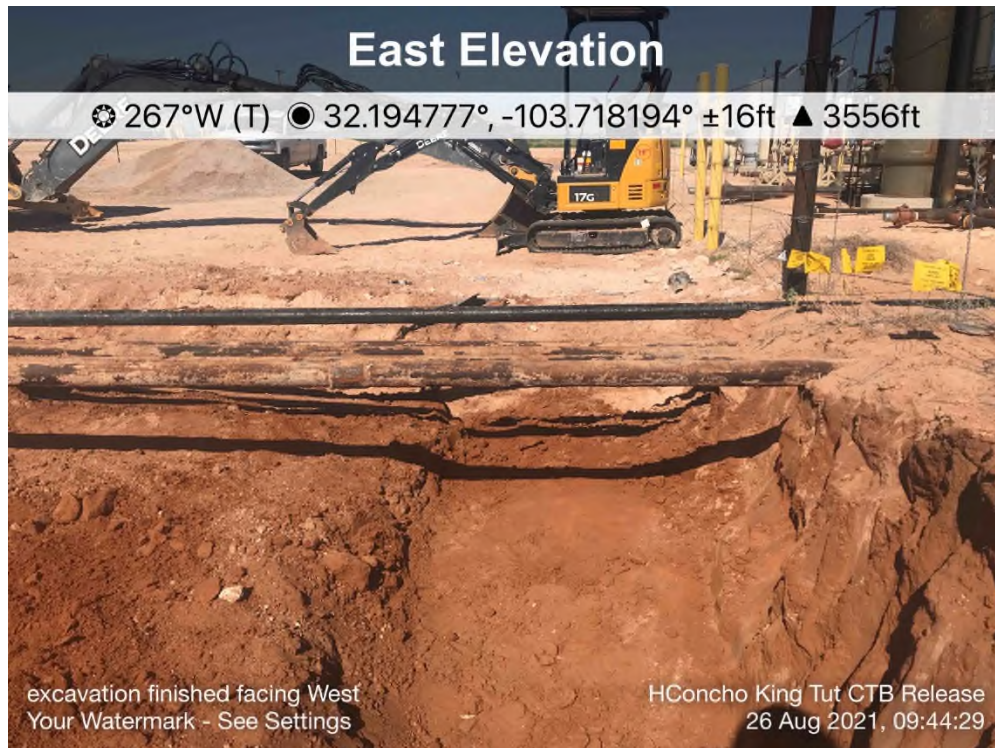
TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View southeast of continued excavation within release footprint.	6
	SITE NAME	King Tut Federal CTB Release	8/19/2021



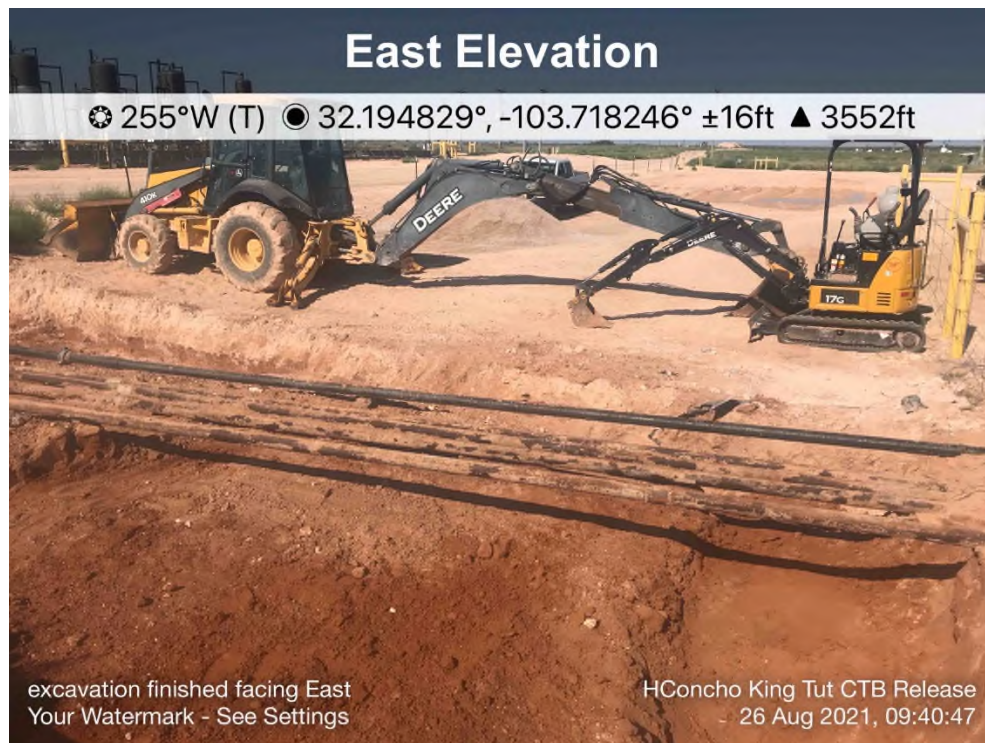
TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View north of final excavation within release footprint.	7
	SITE NAME	King Tut Federal CTB Release	8/26/2021



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View southwest of final excavation within release footprint.	8
	SITE NAME	King Tut Federal CTB Release	8/26/2021



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View west of final excavation within release footprint on north end.	9
	SITE NAME	King Tut Federal CTB Release	8/26/2021



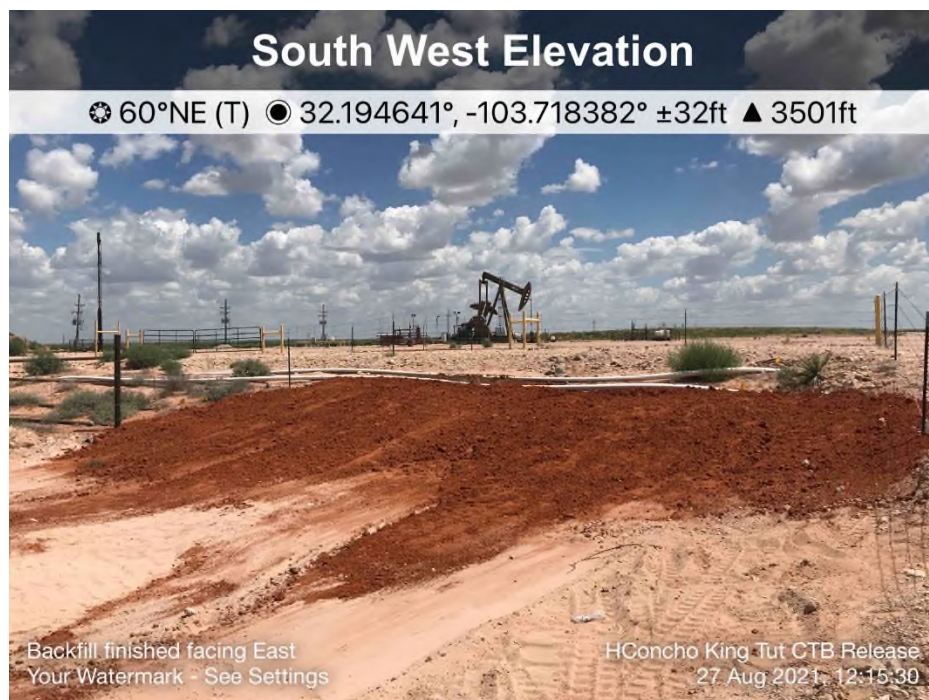
TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View east of final excavation within release footprint in central area.	10
	SITE NAME	King Tut Federal CTB Release	8/26/2021



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View west of final excavation within release footprint on south end.	11
	SITE NAME	King Tut Federal CTB Release	8/26/2021



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View south of final excavation within release footprint on south end.	12
	SITE NAME	King Tut Federal CTB Release	8/26/2021



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View northeast of backfilled excavation.	13
	SITE NAME	King Tut Federal CTB Release	8/27/2021



TETRA TECH, INC. PROJECT NO. 212C-AU-02530A	DESCRIPTION	View north over backfilled excavation.	14
	SITE NAME	King Tut Federal CTB Release	8/27/2021

APPENDIX E

Waste Manifests



Permian Basin

Customer: CONOCOPHILLIPS
Customer #: CRI2190
Ordered by: MATTHEW CASTREJON
AFE #:
PO #:
Manifest #: 1
Manif. Date: 8/19/2021
Hauler: MCNABB PARTNERS
Driver: JESUS
Truck #: M33
Card #
Job Ref #

Ticket #: 700-1231433
Bid #: O6UJ9A000HH0
Date: 8/19/2021
Generator: CONOCOPHILLIPS
Generator #:
Well Ser. #: 999908
Well Name: KING TUT FEDERAL CTB
Well #:
Field:
Field #:
Rig: NON-DRILLING
County: LEA (NM)

Facility: CRI

Product / Service

Quantity Units

Contaminated Soil (RCRA Exempt)

12 18.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

☒ RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature

R360 Representative Signature

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____

Date: _____



Permian Basin

Customer: CONOCOPHILLIPS
Customer #: CRI2190
Ordered by: MATTHEW CASTREJON
AFE #:
PO #:
Manifest #: 2
Manif. Date: 8/19/2021
Hauler: MCNABB PARTNERS
Driver: JESUS
Truck #: M33
Card #
Job Ref #

Ticket #: 700-1231477
Bid #: O6UJ9A000HH0
Date: 8/19/2021
Generator: CONOCOPHILLIPS
Generator #:
Well Ser. #: 999908
Well Name: KING TUT FEDERAL CTB
Well #:
Field:
Field #:
Rig: NON-DRILLING
County: LEA (NM)

Facility: CRI

Product / Service**Quantity Units**

Contaminated Soil (RCRA Exempt)

1218.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature**R360 Representative Signature****Customer Approval****THIS IS NOT AN INVOICE!**

Approved By: _____

Date: _____



Permian Basin

Customer: CONOCOPHILLIPS
Customer #: CRI2190
Ordered by: MATTHEW COACHREJON
AFE #:
PO #:
Manifest #: 535509
Manif. Date: 8/20/2021
Hauler: MCNABB PARTNERS
Driver: ACIE
Truck #: M83
Card #
Job Ref #: 3

Ticket #: 700-1231689
Bid #: O6UJ9A000HH0
Date: 8/20/2021
Generator: CONOCOPHILLIPS
Generator #:
Well Ser. #: 999908
Well Name: KING TUT FEDERAL CTB
Well #:
Field:
Field #:
Rig: NON-DRILLING
County: LEA (NM)

Facility: CRI

Product / Service**Quantity Units**

Contaminated Soil (RCRA Exempt)

16.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

- ☒ RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature**R360 Representative Signature****Customer Approval****THIS IS NOT AN INVOICE!**

Approved By: _____

Date: _____

I6UJ9A01JWFG

8/23/2021 1:43:47PM

Name: Matthew Cachrejon
Phone No.:

Operator No. _____
Operators Name: Conoco Phillips
Address: _____
City, State, Zip: _____
Phone No.:

GENERATOR

Permit/RRC No. _____
Lease/Well Name & No. King Hut Federal
County CTB
API No. _____
Rig Name & No. N/A
AFE/PO No. _____

NO. 535509

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Cuttings	Washout Water (Non-Injectable)	Washout Water (Injectable)
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	Completion Fluid/Flow back (Injectable)
Water Based Cuttings	Produced Water (Non-Injectable)	Produced Water (Injectable)
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other: _____ *please select from Non-Exempt Waste List on back

QUANTITY: B - BARRELS 16 L - LIQUID 20 Y - YARDS 0 E - EACH

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 Regulatory determination, the above described waste load is (Check the appropriate classification)

- ☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS NAME

DATE

SIGNATURE

TRANSPORTER

Transporter's Name: McNabb Partners Driver's Name: Alie
Address: _____ Print Name: _____
Phone No. #3 Phone No. m83
Truck No. m83

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

TRUCK TIME STAMP

IN: _____ OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. 5015

Site Name/ Permit No. Halfway Facility / NM1-006
Address: 6601 Hobbs Hwy US 62/180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-393-1079

NORM READINGS TAKEN? (Circle One) YES ☒ NO ☐
PASS THE PAINT FILTER TEST? (Circle One) YES ☒ NO ☐

If YES, was reading = 50 micro roentgens? (circle one) YES ☒ NO ☐

TANK BOTTOMS

Feet	Inches	BS&W/BBLs Received	BS&W (%)
1st Gauge		Free Water	
2nd Gauge		Total Received	
Received			

I hereby certify that the above load material has been (circle one): ACCEPTED ☒ DENIED ☐ If denied, why? _____

NAME (PRINT)

DATE

TITLE

SIGNATURE

Company Name McNabb
Name McNabb
Phone No. Cachrejon

Operator No. ConocoPhillips
Operators Name ConocoPhillips
Address
City, State, Zip
Phone No.

GENERATOR

NO. 535509

Permit/RRC No. King Tut Federal
Lease/Well Name & No. CTB
County
API No.
Rig Name & No. N/A
AFE/PO No.

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Cuttings	Washout Water (Non-Injectable)	Washout Water (Injectable)
Water Based Muds	Completion Fluid/Flow back (Non-Injectable)	Completion Fluid/Flow back (Injectable)
Water Based Cuttings	Produced Water (Non-Injectable)	Produced Water (Injectable)
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other

*please select from Non-Exempt Waste List on back

QUANTITY 16 B - BARRELS 20 L - LIQUID 0 Y - YARDS 0 E - EACH

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

- ☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS NAME

DATE

SIGNATURE

TRANSPORTER

Transporter's Name McNabb Driver's Name Acie
Address Print Name
Phone No. #3 Phone No. m83
Truck No.

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE 8/20

DRIVER'S SIGNATURE

DELIVERY DATE 8/20

DRIVER'S SIGNATURE

TRUCK TIME STAMP

DISPOSAL FACILITY

RECEIVING AREA

IN: OUT:

Name/No. 5015

Site Name/ Permit No. Halfway Facility / NM1-006
Address 6601 Hobbs Hwy US 62/180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-393-1079

NORM READINGS TAKEN? (Circle One) YES YES NO NO If YES, was reading > 50 micro roentgens? (circle one) YES YES NO NO
PASS THE PAINT FILTER TEST? (Circle One) YES YES NO NO

TANK BOTTOMS

Feet	Inches	BS&W/BBLs Received	BS&W (%)
1st Gauge		Free Water	
2nd Gauge		Total Received	
Received			

I hereby certify that the above load material has been (circle one): ACCEPTED 8/20 DENIED Alm If denied, why? Impa

NAME (PRINT) McNabb

DATE 8/20

TITLE Alm

SIGNATURE Impa



(PLEASE PRINT)

Company Man Contact Information

Name PhillipsPhone No. Cachrejon

GENERATOR

NO. 535509

Operator No. Conoco Phillips

Operators Name Conoco Phillips

Address

City, State, Zip

Phone No.

Permit/RRC No.

Lease/Well Name & No. King Tut Federal

County CTB

API No.

Rig Name & No. N/A

AFE/PO No.

EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Muds	Washout Water (Non-Injectable)	Washout Water (Injectable)
Oil Based Cuttings	Completion Fluid/Flow back (Non-Injectable)	Completion Fluid/Flow back (Injectable)
Water Based Muds	Produced Water (Non-Injectable)	Produced Water (Injectable)
Water Based Cuttings	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Produced Formation Solids	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
Tank Bottoms	Truck Washout (exempt waste)	
E&P Contaminated Soil		
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

NON-EXEMPT E&P Waste/Service Identification and Amount

All non-exempt E&P waste must be analysed and be below the threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other *please select from Non-Exempt Waste List on back

QUANTITY B - BARRELS 16 L - LIQUID 20 Y - YARDS 0 E - EACH 0

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

- ☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)

☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS NAME

DATE

SIGNATURE

TRANSPORTER

Transporter's Name McNabb P. Yarns Driver's Name Acie

Address Print Name

Phone No. #3 Phone No.

Truck No. 1683

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

TRUCK TIME STAMP

DISPOSAL FACILITY

RECEIVING AREA

IN: OUT: Name/No. 5010

Site Name/ Permit No. Halfway Facility / NM1-006

Address 6601 Hobbs Hwy US 62/180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-393-1079

NORM READINGS TAKEN? (Circle One) YES YES NO

PASS THE PAINT FILTER TEST? (Circle One) YES YES NO

If YES, was reading > 50 micro roentgens? (circle one) YES NO NO

TANK BOTTOMS

Feet Inches

1st Gauge

2nd Gauge

Received

BS&W/BBLS Received	BS&W (%)
Free Water	
Total Received	

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT)

DATE

TITLE

SIGNATURE



Permian Basin

Customer: CONOCOPHILLIPS
Customer #: CRI2190
Ordered by: MATTHEW CASTREJON
AFE #:
PO #:
Manifest #: 4
Manif. Date: 8/23/2021
Hauler: MCNABB PARTNERS
Driver: ERNESTO
Truck #: M32
Card #
Job Ref #

Ticket #: 700-1232156
Bid #: O6UJ9A000HH0
Date: 8/23/2021
Generator: CONOCOPHILLIPS
Generator #:
Well Ser. #: 999908
Well Name: KING TUT FEDERAL CTB
Well #:
Field:
Field #:
Rig: NON-DRILLING
County: LEA (NM)

Facility: CRI

Product / Service

Quantity Units

Contaminated Soil (RCRA Exempt)

16.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature

R360 Representative Signature

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____

Date: _____



Permian Basin

Customer: CONOCOPHILLIPS
 Customer #: CRI2190
 Ordered by: KELSY WAGGAMAN
 AFE #:
 PO #:
 Manifest #: 5
 Manif. Date: 8/23/2021
 Hauler: MCNABB PARTNERS
 Driver: ERNESTO
 Truck #: 32
 Card #
 Job Ref #

Ticket #: 700-1232107
 Bid #: O6UJ9A000HH0
 Date: 8/23/2021
 Generator: CONOCOPHILLIPS
 Generator #:
 Well Ser. #: 999908
 Well Name: KING TUT FEDERAL CTB
 Well #:
 Field:
 Field #:
 Rig: NON-DRILLING
 County: LEA (NM)

Facility: CRI

Product / Service

Quantity Units

Contaminated Soil (RCRA Exempt)

16.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

☒ RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature

R360 Representative Signature

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____

Date: _____



Customer: CONOCOPHILLIPS
 Customer #: CRI2190
 Ordered by: MATTHEW CASTREJON
 AFE #:
 PO #:
 Manifest #: U
 Manif. Date: 8/24/2021
 Hauler: MCNABB PARTNERS
 Driver: JESUS
 Truck #: M33
 Card #
 Job Ref #

Ticket #: 700-1232440
 Bid #: O6UJ9A000HH0
 Date: 8/24/2021
 Generator: CONOCOPHILLIPS
 Generator #:
 Well Ser. #: 999908
 Well Name: KING TUT FEDERAL CTB
 Well #:
 Field:
 Field #:
 Rig: NON-DRILLING
 County: LEA (NM)

Permian Basin

Facility: CRI

Product / Service**Quantity Units**

Contaminated Soil (RCRA Exempt)

13.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

- ☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature**R360 Representative Signature****Customer Approval****THIS IS NOT AN INVOICE!**

Approved By: _____

Date: _____ 



Permian Basin

Customer: CONOCOPHILLIPS
 Customer #: CRI2190
 Ordered by: MATTHEW CASTROJAH
 AFE #:
 PO #:
 Manifest #: 7
 Manif. Date: 8/24/2021
 Hauler: MCNABB PARTNERS
 Driver: JESUS
 Truck #: M33
 Card #
 Job Ref #

Ticket #: 700-1232376
 Bid #: O6UJ9A000HH0
 Date: 8/24/2021
 Generator: CONOCOPHILLIPS
 Generator #:
 Well Ser. #: 999908
 Well Name: KING TUT FEDERAL CTB
 Well #:
 Field:
 Field #:
 Rig: NON-DRILLING
 County: LEA (NM)

Facility: CRI

Product / Service

Quantity Units

Contaminated Soil (RCRA Exempt)

13.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

☒ RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature

R360 Representative Signature

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____

Date: _____



Customer: CONOCOPHILLIPS
 Customer #: CRI2190
 Ordered by: MATTHEW CASTREJON
 AFE #:
 PO #:
 Manifest #: 8
 Manif. Date: 8/25/2021
 Hauler: MCNABB PARTNERS
 Driver: JESUS
 Truck #: M33
 Card #
 Job Ref #

Ticket #: 700-1232601
 Bid #: O6UJ9A000HH0
 Date: 8/25/2021
 Generator: CONOCOPHILLIPS
 Generator #:
 Well Ser. #: 999908
 Well Name: KING TUT FEDERAL CTB
 Well #:
 Field:
 Field #:
 Rig: NON-DRILLING
 County: LEA (NM)

Permian Basin

Facility: CRI

Product / Service

Quantity Units

Contaminated Soil (RCRA Exempt)

13.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

☒ RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature

R360 Representative Signature

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____

Date: _____



Permian Basin

Customer: CONOCOPHILLIPS
Customer #: CRI2190
Ordered by: MATTHEW CASTREJON
AFE #:
PO #:
Manifest #: 9
Manif. Date: 8/25/2021
Hauler: MCNABB PARTNERS
Driver: JESUS
Truck #: M33
Card #
Job Ref #

Ticket #: 700-1232651
Bid #: O6UJ9A000HH0
Date: 8/25/2021
Generator: CONOCOPHILLIPS
Generator #:
Well Ser. #: 999908
Well Name: KING TUT FEDERAL CTB
Well #:
Field:
Field #:
Rig: NON-DRILLING
County: LEA (NM)

Facility: CRI

Product / Service**Quantity Units**

Contaminated Soil (RCRA Exempt)

13.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

☒ RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature**R360 Representative Signature****Customer Approval****THIS IS NOT AN INVOICE!**

Approved By: _____

Date: _____



Permian Basin

Customer: CONOCOPHILLIPS
 Customer #: CRI2190
 Ordered by: MATTHEW CASTREJON
 AFE #:
 PO #:
 Manifest #: 10
 Manif. Date: 8/26/2021
 Hauler: MCNABB PARTNERS
 Driver: JESUS
 Truck #: M33
 Card #
 Job Ref #

Ticket #: 700-1232883
 Bid #: O6UJ9A000HH0
 Date: 8/26/2021
 Generator: CONOCOPHILLIPS
 Generator #:
 Well Ser. #: 999908
 Well Name: KING TUT FEDERAL CTB
 Well #:
 Field:
 Field #:
 Rig: NON-DRILLING
 County: LEA (NM)

Facility: CRI

Product / Service	Quantity Units
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Contaminated Soil (RCRA Exempt)	13.00 yards
---------------------------------	-------------

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste
☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/ Agent Signature**R360 Representative Signature****Customer Approval****THIS IS NOT AN INVOICE!**

Approved By: _____

Date: _____

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 45062

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 45062
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	9/29/2021